EXECUTIVE SUMMARY

It has been six months since the June flood event occurred in Calgary. The response efforts of citizens, community members, organizations, and The City of Calgary, coordinated by the Calgary Emergency Management Agency (CEMA), supported our city to quickly begin to recover. While immense work has been undertaken, there remains a significant amount of work to do in order for both the city and its residents to fully recover from this disaster.

The Flood Recovery Task Force (the Task Force) was established in July under the direction of a Recovery Director reporting to the Recovery Operations Steering Committee. The mission of the Task Force is to provide leadership and resources for immediate flood recovery activities and support delivery of recovery, mitigation and resilience recommendations for the 2015-2018 business plan and budget cycle.

While our citizens demonstrated great resilience and community spirit during the flood, The City has played a significant role to assist those members of our community who require assistance in recovery. Community & Neighbourhood Services (CNS) supported the immediate needs of citizens post-flood by providing shelter, undertaking door to door assessments, and aligning existing partnerships in order to deliver critical services to impacted communities. Of those 80,000 Calgarians evacuated during the flood, a remaining eight households are being provided housing through Calgary Housing Company (CHC).

The City is working with the Government of Alberta on policy issues related to property ownership and development. This collaborative partnership includes direct public-facing recovery services such as community hall meetings, mobile Disaster Recovery Program (DRP) funding offices, and a proactive winterization program. The City also plays a vital role providing citizens with the permits they require in order to repair, remediate or demolish their homes and businesses. To date, The City has received permit applications on about half of flood-impacted properties. In the remaining cases, either work has proceeded without permits or work has not been started. Development & Building Approvals (DBA) has planned an education campaign encouraging property owners to obtain permits and complete inspections in order to ensure work was done in accordance with applicable safety and building codes.

The full impact to City infrastructure remains to be determined. A master list has been created that identifies 185 infrastructure projects totalling \$445 million in damages sustained as a result of the flood. This list also includes an estimated \$129 million of yet unfunded recovery projects for future years. Many projects began in 2013, and of these 90 of the185 repair or replace damaged infrastructure projects are substantially complete (66%), with a total value of \$120 million.

The City is also focused on understanding how to mitigate future flood events and how to increase the overall resiliency of our city. The Expert Management Panel on River Flood Mitigation is in place and the framework is before Council in report C2013-0732 *Expert Management Panel on River Flood Mitigation Quarterly Report*. The information determined by the Expert Management Panel will be shared with Provincial counterparts and reported to Council in tandem with Recovery Task Force updates. At the direction of Council, a first

grouping of resilience flood projects, and estimated costs, is being established by both the Task Force and the Expert Management Panel and will be brought to Priorities and Finance Committee by 2014 Q1.

Recovery funding is available through insurance and provincial funding programs. In September, The City received a \$50 million advance through insurance. The City of Calgary submitted a Disaster Recovery Program (DRP) application to the province on 2013 September 09, and received a \$63 million advance from the DRP on 2013 September 24. The City is completing the requirements to seek full reimbursement for the \$55 million cost of the emergency response effort, and submission of the required documentation to the province has commenced. The City is also making submissions to additional provincial grant programs, such as the Flood Recovery Erosion Control program (FREC) and the Municipal Staffing Capacity Grant program.

A number of actions were initiated to address the unique challenges presented by the recovery work. These ongoing actions, such as continued updates and improved communication with employees, build on the foundations of the existing talent sourcing strategy and development of human capital plans to ensure the traditional work and recovery efforts of The City are carried out as seamlessly as possible.

ADMINISTRATION RECOMMENDATION(S)

That Council: Receive this report for information.

PREVIOUS COUNCIL DIRECTION / POLICY

PFC2013-0578 *Flood Status Update* regarding the 2013 Flood Event was received for information by Council.

PFC2013-0634 Capital and Operating Budget Revisions for the Period 2013 January 01 to June 30, with Flood Expenditure Update.

PFC2013-0646 *Flood Recovery Task Force Update* report was received for information by Council, including the 2013 Flood Recovery Framework.

C2013-0742 Flood Recovery Task Force: 2014 Business Plan and Budget Adjustment Companion Report was received for information by Council as a companion to the C2013-0668 2014 Proposed Business Plan and Budget Adjustments. During the Business Plan and Budget Adjustment meeting 2013 November 27, Council directed Administration to avoid any increase in operating drainage rates in Utilities (Program 270 Adjustment 2) nor take on self-supported debt for drainage as a result of the flood. Council also directed Administration to allocate, in order, insurance, provincial and federal funding where available, and a one-time transfer from the Fiscal Stability Reserve (FSR), to fund 2014 flood related recovery and resiliency costs in drainage, including funding for three FTEs for 2014, to a maximum draw of the FSR of \$20 million. Additionally, Administration was directed to prepare a report containing a list of, and the

cost of, the first grouping of resilience flood projects through Priorities and Finance Committee. This first list will be delivered to Council by Q1 2014.

BACKGROUND

In 2013 June, extensive flooding occurred in Calgary which damaged large amounts of infrastructure, disrupted services and left many citizens and businesses without power and, in some cases, without accommodation. Details of the flood impact and immediate emergency response were included within the CEMA report EM2013-0822 *2013 June Flood Emergency Response and Initial Recovery Efforts*. Since the disaster, The City has undertaken rebuild and recovery activities with a focus on several priority areas: People, Funding, Infrastructure, Housing and Property and Services.

The Flood Recovery Task Force (the Task Force) was established in July under the direction of a Recovery Director and reports to the Recovery Operations Centre Steering Committee. A Recovery Framework was developed and subsequently approved by Council. A recovery office is staffed and the Task Force continues to address the work needed to repair and recover from the flood event. The mission of the Task Force is to provide leadership, within The City of Calgary and the Calgary community, to identify and resource immediate recovery activities, and to support the delivery of recovery, mitigation and resilience recommendations for the BPBC4 2015-2018 business cycle.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Key highlights and progress of the Task Force deliverables within the five key focus areas in the 2013 Flood Recovery Framework are set out in Attachment 1. Detailed updates are provided below for each of the five focus areas of: People, Funding, Infrastructure, Housing and Property and Services.

Focus Area: People

Citizens and their Communities

Spearheaded by Community & Neighbourhood Services (CNS), The City continues to provide six flood impacted communities with direct services including face to face service delivery to vulnerable residents, identifying resource sources and information to meet needs while also fostering community development opportunities for those who continue to be affected by the flood event. A number of communities that required assistance immediately after the flood are no longer in need of support from The City.

Some early information tracked by The Distress Centre Calgary (211) between July and early September identified that flood related concerns (specifically housing and financial needs) had emerged as the primary issues facing clients. It is important to note that Distress Centre Calgary was also serving the High River community at that time. As of September, calls indicate a return to normal levels, and although the impact of the flood may still be present, it is not being directly attributed by callers as a concern.

CNS provided assessment tools and data collection to determine eligibility for Calgary Housing Company (CHC) emergency lodging, including completing surveys with 109 households (168

individuals). As of 2013 November 17, eight (8) residents remain in CHC properties and are in the process of returning to their homes or alternate accommodations. CNS worked closely with 311 and CHC to develop scripts for service requests and response processes. 195 flood-related service requests have been received by 311.

A total of 1,300 doors have been knocked within the flood affected communities (the majority being Bowness and Sunnyside, at the request of these communities). Community information sessions have occurred with a total of 2,700 residents in attendance. Approximately 320 residents were provided additional support when the need was identified, and appropriate referrals were given when required. Eight agencies were involved in supporting each community with assistance, and 140 internal City contacts were made by CNS staff. Approximately 250 residents were involved in community recovery. This work was conducted in partnership with organizations such as the Canadian Red Cross, community associations and agencies at a neighbourhood level.

To facilitate a coordinated municipal and provincial response, CNS has worked closely with the Government of Alberta (GOA) and Alberta Health Services (AHS). These strong partnerships have resulted in more efficient and coordinated recovery responses for citizens.

Our most vulnerable populations felt an immense impact by the flood. Extraordinary efforts were undertaken by CEMA during the State of Local Emergency (SOLE), and by CNS following the flood, to ensure the basics of safety and shelter were met. The development of a Community Plan for Vulnerable Populations is a foundational component of building community capacity to address the needs of vulnerable Calgarians in future disaster mitigation, response and recovery efforts. Work has begun to develop population specific strategies for recovery and CNS is in the process of convening a group of community organizations to develop and implement such a plan. Drawing on the collective knowledge, resources and connections of the participating organizations, the approach will be collaborative and responsive to the needs of specific vulnerable populations. The group will convene in early 2014, and information on their activities will be included in the next Task Force update.

A donation strategy is in place to direct donors to third party coordination bodies and includes five allocation options to direct donations to people in need or toward infrastructure that is unrecoverable or uninsurable. Donations management is in place, occurring through a partnership with the Calgary Foundation and the United Way.

The flood also impacted approximately 4,000 businesses, causing short and long term business interruption or service loss. As of 2013 December 5, three (3) businesses have self reported a move and eleven (11) businesses have self-reported a closure due to flood impacts (as documented by the DBA Business Maintenance records). Moves and closures data does not necessarily reflect the actual number of moves or closures due to flood impacts, as the Business Licence system relies on businesses to contact The City to advise of their status. Businesses typically contact The City to report permanent or temporary closures that would qualify for a business assessment cancellation. This number will continue to fluctuate as business licences are on a staggered renewal system and businesses turnover regularly.

Ongoing support for those communities and businesses most impacted continues through various initiatives and programs offered by The City, the GOA and our community partners. For example, promotion of small business activity is being championed by Calgary Economic Development with support from The Calgary Foundation, The Calgary Trolley Society, Calgary Transit and several Business Revitalization Zones (BRZ). The neighbourhoods affected by the flood and participating in this program include Bowness, Montgomery, Downtown, Chinatown, 17th Avenue, Fourth Street, Inglewood, Kensington and Victoria Park.

City Employees

A specific communications approach has been undertaken to maintain the spirit of community and collaboration fostered during the early days of the flood response. The Task Force provides communication to employees as the recovery and resilience work goes forward. Approaches internally include information to City employees on what the Task Force is accomplishing, and updates through an internal web presence and myCity posts. Critical dates, such as the budget adjustment process, the election, DRP interactions and event milestones and anniversaries are key elements of the communication strategy.

In addition, information regarding health and wellness has been communicated to employees through a variety of internal communication channels, and continues to be reinforced. The Task Force recognizes the impact (i.e. increased stress) that continued recovery and resiliency work may have on employees as they continue to balance this new workload with established work plans. While data regarding employee health and wellness, such as sickness and accident (S&A), shows no marked increase compared to previous years, the Task Force continues to regularly monitor this area.

A number of Key Result Areas (KRAs) have been identified to help position the organization to address the human resource needs required during recovery work and be more resilient in the future. The KRAs identified are approximately 25% complete and plans are being discussed and formulated to embed the remaining deliverables into HR's 2014 work plan and BPBC4. A number of the deliverables are significant undertakings and will require planning.

Focus Area - Funding

The City is actively seeking recovery funding through insurance and provincial funding programs. In September, The City received a \$50 million advance through insurance. The City of Calgary submitted a Disaster Recovery Program (DRP) application to the province on 2013 September 09, and received a \$63 million advance from the DRP on 2013 September 24. A further advance is being pursued by the Recovery Director and The City is completing the requirements to seek full reimbursement for the \$55 million cost of the emergency response effort, and submission of the required documentation to the province has commenced.

The Government of Alberta has offered specific mitigation funding through the Flood Recovery Erosion Control Program (FREC) and as of as of 2013 November 22, five projects in Calgary have been approved totalling \$12.6 million in funding.

The Government of Alberta is offering a Municipal Staffing Capacity Grant Program to municipalities impacted by the flood. A list is being compiled for submission to the province to recover funding through this grant.

At the direction of the Recovery Operations Centre Steering Committee, the Task Force worked in partnership with Corporate Initiatives to prepare the 2014 Budget Adjustments. Departments were asked to sort flood-related adjustments into four categories. These categories were developed using a combination of the project management framework and prioritization tools and the Calgary Emergency Management Agency's Hazard Identification and Risk Analysis (HIRA) framework. Council approved the recommended flood adjustments, including the one-time funding of resiliency projects within Utilities & Environmental Protection to the amount of \$20 million from the Fiscal Stability Reserve (Attachment 2).

At the Business Plan and Budget Adjustment meeting 2013 November 27, Council directed Administration to avoid any increase in operating drainage rates in Utilities (Program 270 Adjustment 2) nor take on self-supported debt for drainage as a result of the flood. Council also directed Administration to allocate, in order, insurance, provincial and federal funding where available, and a one-time transfer from the Fiscal Stability Reserve (FSR), to fund 2014 flood related recovery and resiliency costs in drainage, including funding for three FTEs for 2014, to a maximum draw of the FSR of \$20 million.

At this same meeting, Administration was also directed to prepare a report containing a list of and the cost of, the first grouping of resilience flood projects and report through Priorities and Finance Committee no later than 2014 Q1. Work is underway to develop this list. This list may also include program costs associated with supporting our employees through the delivery of sessions or training on dealing with stress or developing a workforce inventory.

Focus Area - Infrastructure

In the immediate aftermath of the flood, The City was focused on work related to public safety and the repair of critical infrastructure. While this work was vital to the short-term recovery of our community, the emphasis has now shifted to addressing longer-term rebuilding, regeneration, and rehabilitation issues that will ensure Calgary is resilient to future shocks and stresses.

The full impact to City infrastructure remains to be determined. A master list of 185 infrastructure projects, including Civic Partners such as the Calgary Zoo, Talisman and the Calgary Public Library, resulting from the flood equals a total of \$445 million in damages. Council approved funding for \$182 million in 2013 (PFC2013-0634 *Capital and Operating Budget Revisions for the Period 2013 January 01 to June 30, with Flood Expenditure Update*) and \$134 million in 2014 (PFC2013-0668). This report also included estimates for information of \$129 million for future years of recovery projects that are yet unfunded. Many projects began in 2013, and of these 90 of the185 repair/replace damaged infrastructure projects are substantially complete (66%) totalling \$120 million. An overview of the 2013 Municipal Infrastructure – Flood Recovery Projects Update is provided in Attachment 3.

Since the end of June, City crews have repaired over 250 sinkholes, opened 150km of floodimpacted roadways, managed approximately 100,000 tonnes of flood debris at landfills, cleared 26 tonnes of debris from the Elbow River, flushed more than 44kms of the storm and sanitary systems, cleaned and reopened 15 City parks, repaired 57kms of the 93kms of pathway that was damaged, and resurfaced and cleaned seven of the eight impacted playgrounds.

More than 100 riverbank erosion sites have been identified. All of these sites have been assessed and prioritized. Repair to critical sites is underway in Inglewood and Sunnyside, along Home Road and Memorial Drive. Design work for three additional sites (Memorial Drive and 19 Street, the area adjacent to the Enmax Power Station and Diamond Cove) will occur over the winter. The Government of Alberta has provided Flood Recovery Erosion Control (FREC) grant funding for these projects. Work on all the critical sites will be completed prior to flood season 2014 and is occurring collaboratively between Water Services and other business units such as Parks and Roads.

While it is important to direct resources to rebuilding infrastructure and restoring services, The City also recognizes the need to invest in future disaster risk reduction. The City is collaborating with other orders of government and external stakeholders to identify opportunities for legislative, regulatory, and policy amendments. In addition, The City has committed to identifying a list of projects that will increase the overall resiliency of our city. To this end, The City has convened an Expert Management Panel on River Flood Mitigation that has been tasked with researching the various options for mitigating the impact of future flood events on the Calgary community. The panel will focus its research on watershed management, event forecasting, climate change, storage/diversion, and infrastructure and property resiliency. The public has also been invited to participate as members of the working committees of the Expert Panel. An overview of the Expert Panel will be provided to Council December 16 in report C2013-0732 *Expert Management Panel on River Flood Mitigation Quarterly Report*. This panel will also align its work with the Provincial Flood Mitigation Advisory Panel and The City of Calgary Flood Recovery Task Force.

Focus Area: Housing and Property

During and immediately following the flood event, The City coordinated and operated reception centres and dorms until 2013 July 28. The Province of Alberta has provided temporary neighbourhoods (Great Plains opened 2013 October 4) for those unable to return home due to the 2013 June flood. At the request of the province, two City of Calgary staff work full time to provide information to new residents at the Great Plains site regarding City of Calgary services.

<u>DBA – Permit Volume Activity:</u> Generally, the numbers in this section reflect the initial understanding of flood recovery, as owners responded to the 2013 Flood to restore basic operations in flood damaged buildings. Approvals as of 2013 December 5:

- Demolition Permits:
 - 10 completed and 25 in progress;
 - At minimum another 16 projected;
 - Additional demolitions are anticipated as owners determine that a full-scale rebuild is a preferred option, rather than flood restoration;

- Building Permits (BP) :
 - 182 completed and 85 in progress;
 - Future projected BP volume is 300+ permits (this class of permit is for reconstruction of flood damaged interior space or fire alarm systems);
- Trade Permits:
 - 1366 completed and 1319 in progress;
 - This class of permit is for replacement of electrical panels, furnaces, hot water tanks through the online ePermit process.

<u>Winterization Alert:</u> Currently un-occupied and/or unheated buildings, as a result of the flood, is a concern. If left without heat, buildings are susceptible to freezing temperatures which can cause significant damage to the building, water utility connections, and the soil around the foundation. A winterization media campaign was initiated to remind building owners and operators to take precautions to mitigate potential issues, prompting 39 customers calls to initiate water shutoffs, and 151 customer calls for technical assistance centre for building code information.

Several other land and building permit related services have been directly offered to flood impacted communities, such as:

- Bowness Open House serving over 100 residents;
- Building Safety Outreach campaign (including direct mail) to help advise property owners as to where to seek technical assistance and permit information;
- DBA is coordinating with Water Resources and the Province to assist private property homeowners with Riverbank Erosion Protection applications required under the Water Act, and The City's Land Use Bylaw, respectively;
- 2013 Flood Line and New Development Applications: proactively advising applicants for new development in the floodway or flood fringe;
- A CPAG Flood Approvals Team is now in place to assist with "flood recovery" Development Permit (DP) applications and an expedited process for all DP review steps. A total of seven (7) DP files are in process and 100 DP "flood recovery" files are projected with additional anticipated as homeowners may opt for a new build rather than restoration;
- Leadership regarding eventual disposition of Floodway Buyout properties due to land use approval matters, and for demolition permits;
- DBA has implemented a process to support owners who participate in the Province's DRP for basement-improvements for flood mitigation. DBA will process the Province's Permit Form for Safety Inspection Report, which ultimately provides owners reimbursement as well as the removal of the DRP caveat placed on the respective land title for the property. Based on Provincial data for DRP applications, the related City permit volume is projected at 1000+ homes. The projected volume of such permits for multi-residential and commercial buildings is still being determined.
- DBA was instrumental in having the original Standata Bulletin issued by the Province amended, to recognize the practicality of standard basement finishes (suitable costeffective method).

A second phase of flood recovery permit activity is anticipated based on the need for more comprehensive reconstruction with existing buildings or new construction. This second phase will illustrate the steps that owners are going through to process insurance claims, or, DRP applications, or other personal factors. DBA has prepared projected volumes to adjust staffing resources and track flood recovery for the purposes of submitting a staffing claim to the province.

Focus Area: Services

City Services

As outlined in the Recovery Framework, The City continues to focus on delivering services that meet or exceed pre-flood levels while ensuring a safe and vibrant community for all Calgarians. Although the majority of City services were back at full capacity in the days and weeks following the flood, full recovery from this event will take years. The City is committed to the important work that lies ahead.

The Ipsos Reid 2013 Citizen Satisfaction Survey identified perceptions of The City's flood performance are decidedly positive. Virtually all (95% to 99%) citizens give The City positive ratings on each of the seven aspects of flood performance evaluated, including recovery.

The flood had a significant impact on our ability as an organization to deliver services to Calgarians. There were approximately 2,800 City employees displaced by the flood (unable to access offices and work locations or these locations were damaged) and the public lost access to business counters and Council's chamber. Productivity loss is estimated at a minimum of \$1.6 million per day. In addition, there were five City buildings that suffered extensive, long term damage due to flood waters. This included three key facilities located within the Municipal Complex: Historic City Hall, the Administrative Building, and the Municipal Building. The temporary loss of access to these facilities not only had a negative impact on the services that they housed but also those services supported by operations in these buildings.

The flood has created an increased workload for DBA. DBA has been able to support Calgarians directly impacted by the flood while also maintaining standard service levels for regular business. One of the key initiatives that has enabled DBA to operate effectively despite the increased workload is the ePermits system. This system allows users to access services electronically for furnace, electrical, and hot water appliance permits. This significantly reduces the time it takes to issue permits, thereby improving the ability of The City to assist residents and business owners as they repair or rebuild their homes and businesses. The City was able to reduce the impacts related to the loss of facility access by leveraging mobile technology, assigning alternative workspaces, and implementing departmental business continuity plans.

Employee ability to provide City services impacted by the flood:

- 2,800 employees immediately displaced
- 858 Citrix accounts were issued to allow remote access to City systems, 145 aircards, 527 pieces of mobile technology issued

- 900 employees were back in their offices by 2013 July 2311 was operational, Calgary.ca and permits online were up and running within 24 hours (of the initial flooding) and temporary service kiosks were set up to minimize service delivery disruptions to the public
- The City opened four temporary tax payment, permit, and licence counters within 48 hours of the flood to assist Calgarians while the Municipal Complex was closed
- Council chamber and committee rooms relocated within 72 hours to the north east
- All employees were back in buildings as of 2013 August 27

Governance & Policy

A review of the Land Use Bylaw is proposed. The goal is to undertake a review of current City policies and the Land Use Bylaw 1P2007 (LUB) to investigate the status quo and opportunities to further resilient development within flood hazard areas (i.e. Floodway, Flood Fringe and Overland Flow areas) through land use policies and bylaws. This project will align with The Government of Alberta's Flood Hazard Area (FHA) development regulations as far as possible, as the province proceeds with its respective policy and mapping review.

The details of this work were included within report PUD2013-0806 *Flood Hazard Area Policy and Land Use Bylaw Review Project* brought before the 2013 December 04 Standing Policy Committee meeting on Planning and Urban Development.

Additionally, The City of Calgary has proactively provided information to the Government of Alberta regarding Bill 27 *Flood Recovery and Reconstruction Act* pertaining to the authority and powers of a Director of Emergency Management during an emergency event. Correspondence on this issue will continue into 2014.

Stakeholder Engagement, Research and Communication

Overall, The City of Calgary truly has an opportunity to set the gold standard for disaster recovery. This is a direct result of the thorough needs assessment completed, the establishment of the recovery office and resilience panel, and the recovery framework and reporting mechanisms put in place. Challenges identified include clear financial prioritization of projects, capacity in the business units to deliver the projects, and coordination among other stakeholders such as the province, our partners and the community.

Citizen engagement has occurred in many ways including door knocking campaigns, public open houses, public presentations, on-line, 311 and via media and social media Calgary.ca. Some examples have been cited earlier in this report. Other opportunities have included:

- Transportation Infrastructure ran an online survey with over 1,400 respondents and an informal drop in session regarding the process to replace the Elbow River pedestrian bridges; and
- The Expert Management Panel on River Flood Mitigation collected ideas from the public online. A summary of the feedback will be published on Calgary.ca once the ideas are

compiled and reviewed. An Expression of Interest for Subject Matter Experts to participate in six theme areas closed 2013 November 30. Strategic Alignment

This report aligns with the Municipal Development Plan (MDP), the Calgary Transportation Plan (CTP), the Municipal Emergency Plan and the 2020 Sustainability Direction (Safety and Resiliency is identified as a focus area. Calgary, its communities and neighbourhoods are safe, resilient and supportive: By 2020, communities will have demonstrated the resiliency to self-activate to respond to natural disasters).

Social, Environmental, Economic (External)

The Triple Bottom Line (TBL) is repeatedly referenced in literature regarding disaster recovery and resilience. The Task Force has centred its key result areas within the 2013 Flood Recovery Framework around the TBL sustainable development principles.

The social impacts of the flood continue to be monitored and supported through ongoing liaison with directly impacted communities, members of Council and their staff, calls to 311 and 211, and the strong network of relationships between The City of Calgary and service agencies within Calgary.

Environmental impacts continue to be identified and assessed. The City of Calgary continues to work with other orders of government and other municipalities that have experienced disasters to understand the impacts and to identify next steps and responsibilities in repair and mitigation.

The Task Force has aligned the deliverables of the 2013 Flood Recovery Framework to the business plan and budget coordination cycles of The City of Calgary to capitalize on organizational capacity and effectiveness.

Financial Capacity

Current and Future Operating Budget:

The potential to request additional 2014 operation funding exists.

Current and Future Capital Budget:

Administration was directed to prepare a report containing a list of, and the cost of, the first grouping of resilience flood projects through the Priorities and Finance Committee. This first list will be delivered to Council by Q1 2014. There will be capital funding requests to support the list of resiliency projects.

Risk Assessment

The City continues to work with the insurance industry. Concerns include that City of Calgary insurance costs for flood insurance will be increasing with limitations on total coverage amounts.

The City may not recover all costs associated with the recovery of infrastructure and services, which could potentially affect future capital and/or operating budgets.

Failure to build resiliency measures into projects will increase The City's vulnerability to future flooding or water events. The Government of Alberta has identified a comprehensive flood mitigation strategy that illustrates the opportunity for partnership among households, municipalities and other orders of government. In tandem there will be an opportunity to review our recovery work, identify lessons learned, and make efforts to increase our organizational preparation for future events. This is a key factor to realizing the Comprehensive Emergency Management model embraced by CEMA.

There is a risk to productivity by failing to maintain employee wellness and engagement. Additionally, acquiring and/or mobilizing the human capital required to adequately resource recovery work, which may be more acute in key or hard-to-fill positions, will have an impact on The City's ability to repair and recover from the flood.

Finally, risk of loss of public confidence and corporate reputation due to failure to:

- 1. Address infrastructure problems in a timely or thoughtful manner;
- 2. Provide accurate and consistent information in a timely manner;
- 3. Deliver services that citizens have come to expect (both flood related and regular operations); and

Ensure land use policies and bylaws promote resilient development.

REASON(S) FOR RECOMMENDATION(S):

The 2013 June flood event created significant damage to municipal infrastructure and service delivery as well as to our communities. Administration continues to support flood recovery as expressed through the 2013 Flood Recovery Framework. Additional recommendations for continued recovery, mitigation and resilience will be brought forward to Council by 2014 Q1, as directed during 2014 Business Plan and Budget Adjustments.

ATTACHMENT(S)

- 1. Flood Recovery Operations Key Result Areas and Deliverables
- 2. 2014 Flood Related Projects and Approved Budgets (By Category)
- 3. 2013 Municipal Infrastructure Flood Recovery Projects Progress Summary
- 4. Master List Flood Related Projects (2013 November)