

2013 Flood Recovery and Resilience Update

2013 Flood Recovery

Reporting and Monitoring Recovery Process

In 2013 June, Calgary was impacted by a flood disaster resulting in significant municipal infrastructure damage. A Recovery Operations Centre was established to oversee five recovery pillars, two of which were Infrastructure and Funding, with ROC coordination activities ceasing in the Fall of 2015. A Municipal Infrastructure Recovery Program (MIRP) was established to track, monitor and report on City of Calgary infrastructure and asset recovery and funding progress. This team of city staff continue to oversee the project completion and financial recovery of DRP eligible flood impacted infrastructure and asset projects. The MIRP team includes representation by Corporate Analytics and Innovation, Financial Support, Parks & Open Spaces, Recreation Opportunities, Transportation (Streets, Sidewalks & Pathways), Water Resources and Resilience & Infrastructure. Monthly reports on the progress and status of the recovery work are conducted, and the City of Calgary standard of practice has been integral to support evidence based updates to the Government of Alberta to support a high rate of success in receiving funds from insurance, the DRP and other government programs.

Funding from 2013 Tax Room

At the time of the event, Council was deliberating the use of \$52M in available tax room to support various municipal projects. On 2013 November 25 (C2013-0668) Council recommended to allocate the \$52M of 2014 tax room to Lifecycle Maintenance and Upgrade Reserve for tax supported resiliency projects. Council also authorized Administration additional use of these funds for bridge purposes for flood relief and recovery expenses, if needed. Administration was to utilize surplus funds from this \$52M, if any, on betterment of disaster mitigation and prevention infrastructure. These were used to support flood recovery efforts that were both insurable and un-insurable costs.

Funding from the Fiscal Stability Reserve

In 2013 November (C2013-0668), Council identified \$100M of funding from the Fiscal Stability Reserve (FSR) to address flood recovery costs not covered by insurance or third-party funding sources, such as government funding programs. The FSR funding was intended to act as a flow through fund to support the residual tax supported flood-related capital projects funding shortfalls to a maximum of \$100 million.

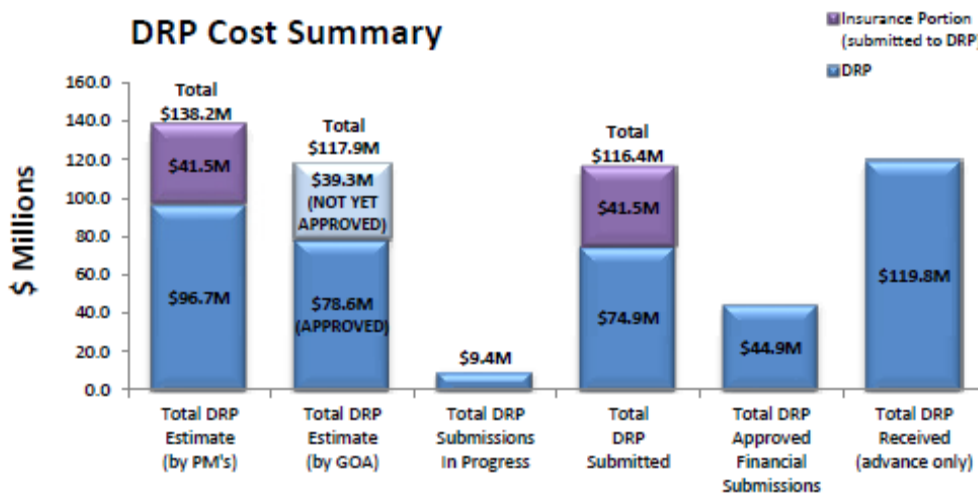
Also in 2013 November (C2013-0668), Council directed Administration to not increase Operating drainage rates in Utilities nor take on self-supported debt for drainage as a result of the flood, and to allocate in order, insurance, provincial and federal funding where available, and a one-time transfer from the FSR to a maximum of \$20M to fund 2014 flood related recovery and resiliency costs in drainage.

Funding from the Disaster Recovery Program (DRP)

The Disaster Recovery Program (DRP) is a Federal program administered by the province for five years post eligible. The Southern Alberta Floods of 2013 were deemed DRP eligible. The DRP remains accessible to The City of Calgary, per our extension request, to 2019 June 20.

The flood recovery process has been highly technical, requiring close monitoring of project progress, forecasting project completion and financial submission against a finite DRP timeline, ongoing communication and advocacy with the Government of Alberta for process and decision making, and communicating progress to Council and the public. The DRP process requires The City of Calgary to demonstrate detailed project management, tracking and reporting of project progress, communication and collaboration with the province to ensure timely inspections, project completion and financial submissions. Figure 1 offers a summary of the cost and reimbursement of eligible DRP projects.

Figure 1: Summary Disaster Recovery Program Submissions (2018 August 31)



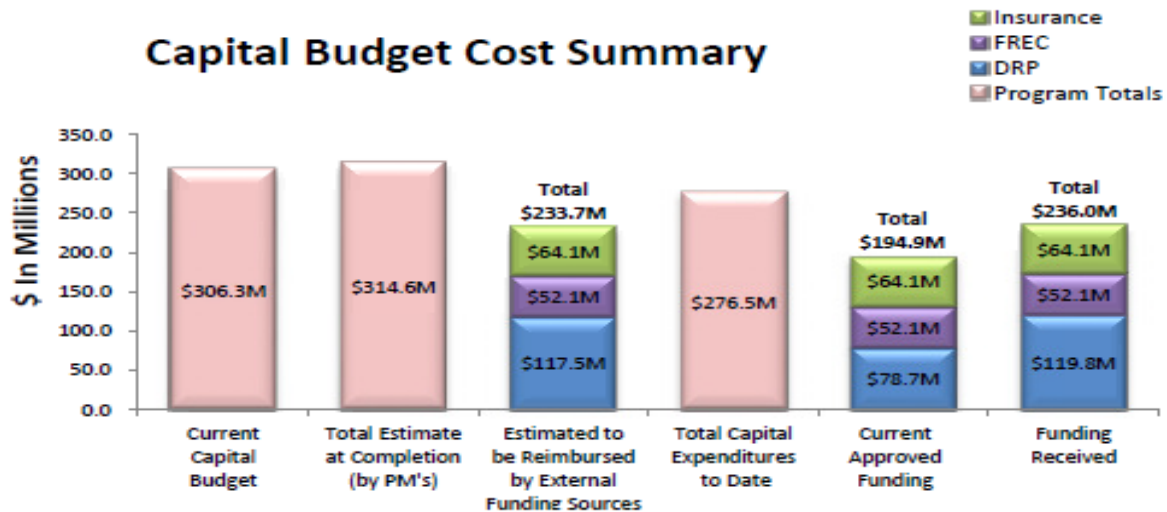
Funding from the Flood Recovery Erosion Control (FREC) Program

Funding totaling \$52.1M was obtained in 2014 from the Government of Alberta for Flood Recovery Erosion Control (FREC), which was intended to address immediate repairs and long-term community mitigation projects. A range of City of Calgary infrastructure projects were supported partially or fully by funding from the FREC program, including but not limited to the Elbow River Pedestrian bridges, parks such as Griffith Woods, Sue Higgins, Carburn and Sandy Beach, roads and bridge repair, wastewater management and power sites.

Insurance Funding

The insurable estimate impact of the flood totaled \$107M, of which \$64M has been recovered through insurance coverage. Insurance deductibles totaling \$44M were submitted to the DRP. Fifty percent of The City of Calgary insurance deductibles were deemed eligible by the province for reimbursement through the DRP totaling \$20.8M. The City of Calgary has appealed the provincial decision to fund fifty percent of the insurance deductibles and has requested full recovery of the \$44M total insurance deductibles. This appeal remains in consideration by the Treasury Board of Alberta.

Figure 2: Summary of Flood Capital Budget Cost Summary (2018 August 31)



*Note: Data extracted from Finance's Capital Budget and Expenditures report (as of Jul.31/18)
Total Estimate at Completion is based on semi-annual forecasting completed in July, 2018 and does not include estimates for the 17 projects not part of the Capital Budget

Investment in Flood Resilience

Shortly after the flood, Council asked Administration to bring a priority list of projects and programs that would support resilience in our community. Administration worked collaboratively to develop a range of community resilience, operations and infrastructure flood resiliency projects (C2014-0316). Council approved \$15.7M from the Fiscal Stability Reserve to support projects and flood related operations through 2015-2018 which have been implemented in this business cycle. Additional to this investment was \$25M in FSR funding to mitigate future flood impacts to the Calgary Zoo (C2014-0279).

In 2014, the Government of Alberta provided flood impacted communities the opportunity to access funding for mitigation through the **Alberta Community Resilience Program (ACRP)**. ACRP is a province-wide, cost-shared capital funding program with focus on long-term community resilience. Eligible projects include works that enhance or enable protection of critical infrastructure, and/or mitigate public safety hazards. The City of Calgary will receive \$150M over ten years for flood mitigation projects from the ACRP program. This is a cost share program with a variable formula depending on the project size. Water Resources applies annually to the ACRP program with Council approved eligible projects, examples of which include flood barriers, Glenmore gates upgrade, Stormwater outfall upgrades, and Upper Plateau Separation project (C2017-0462).

In 2014, The Government of Alberta approved the recovery of \$33M in operating funds resulting from the flood response, and this recovered funding was placed into the **Reserve for Future Capital (RFC)** for resilience investments (Table 2). This funding has supported specific resilience investments including the matching portion of the ACRP program, investments in the

Shouldice Park and artificial turf replacement (non-recoverable through DRP), and some emergency response and recovery operational funding.

Infrastructure Calgary Steering Committee continues to apply a resilience lens while reviewing and prioritizing capital investments. Resilience is a key element within the City of Calgary Infrastructure Investment Strategy approved by Council (C2017-0214), is embedded within our corporate investment prioritization criteria, and is a main incentive behind the Calgary Resilience Strategy being developed. In 2017, Infrastructure Calgary supported flood resilience within the additional capital projects approved by Council to address gravel bars, specifically Centre Street gravel bar within the Bow River (C2017-0214). This project is deemed critical as part of the overall Water Management plan and are not eligible through the FREC or ACRP programs.

Resilience – our ability to withstand chronic stresses and acute shocks – remains a focus for our infrastructure investment within the 2019-2022 One Calgary service plans and budgets.

Status of Recovery and Resilience Investment by Funding Type

The Fiscal Stability Reserve has an important role in supporting flood recovery and resilience project funding. As of 2018 July 31, The FSR actuals to date used to support flood recovery and resilience total \$56M (Table 1). An estimated \$2.5M of unrecoverable costs exist due to four projects that cannot be completed within the six year DRP timeframe. These projects are all river crossings and are constrained due to the restricted construction window to protect fish habitat. These costs are expected to be covered through the FSR identified for flood recovery.

Some river crossing projects submitted to the DRP totaling \$21M have been deemed ineligible for recovery funding, and are therefore recommended for draw down from the \$100M FSR.

It is difficult to exactly understand what the final cost and related use of the FSR to support Flood Recovery and Resilience will be. It is critical to maintain access to this funding source until the DRP program, including final review and reimbursement decisions by the Government of Alberta of all City of Calgary flood financial submissions, is complete. Risks to completion of the program and ultimately financial recovery by The City include: the consistency of provincial administration of the DRP (including inspections through the DRP and processing financials); maintaining the current 89% recovery rate; the ability to obtain timely permits necessary for work in and aside the rivers; and the pending decision from the Treasury Board regarding flood insurance deductibles. With these risk factors in mind, the projected FSR draw to support flood recovery is approximately \$80M minimum by the closure of the DRP. This projected \$80M includes the addition of the following to the current FSR balance of \$56M: the four outstanding projects post 2019 June 20 at \$2.5M; the \$21m ineligible for recovery funding; and includes 30% contingency on remaining projects to be submitted to the DRP program. It is anticipated that final review and approval of the DRP submissions will take place by the Government of Alberta in 2019-2020. The total draw on the FSR held for flood recovery will not be understood until the DRP approval process is complete.

Table 1: Fiscal Stability Reserve (As of 2018 July 31) – Flood Recovery and Resilience

	Approved	2013	2014	2015	2016	2017	2018 YTD	Total Actuals
\$100M FSR	100,000,000	-	12,707,000	(4,892,000)	(144,000)	5,343,000	8,000	13,022,000
Resiliency FSR	18,610,000	-	3,618,000	6,801,000	2,563,000	992,000	253,000	14,227,000
Utilities (Water)	20,000,000	-	118,000	-	1,836,000	2,482,000	1,196,332	5,632,332
Calgary Zoo Resiliency	25,000,000	-	-	764,000	20,477,000	382,000	2,220,316	23,843,316
Total	163,610,000	-	16,443,000	2,673,000	24,732,000	9,199,000	3,677,648	56,724,648

As described in detail above, the funding earmarked in the Reserve for Future Capital for flood recovery and resilience (Table 2) supports completion of flood recovery projects, matching funds for grant programs such as the ACRP, and City of Calgary flood resilience projects as part of our Water Management plan.

Table 2: Reserve for Future Capital (As of 2018 July 31) – Flood Recovery and Resilience

Description	2014 / 2015 Expenditures To Date	2016 Expenditures To Date	2017 Expenditures To Date	2018 Expenditures To Date	Balance Expenditures To Date	Forecast	Remaining
Emergency Operations Claims	(33,467,124)				(33,467,124)	-	(33,467,124)
Emergency and Recovery Claims		(5,316,308)			(5,316,308)	-	(5,316,308)
CANTF1 and Elbow River Debris Cleanup			(569,989)		(569,989)	-	(569,989)
Shouldice, Artificial Turf Repairs			3,000,000		3,000,000	-	3,000,000
Recovery operating claims (2016 DRP admin.)				(1,993,730)	(1,993,730)		(1,993,730)
Emergency operating claims				(464,840)	(464,840)		(464,840)
Future Flood Recovery and Resilience Projects (e.g. centre Street gravel bar, flood barriers and upper plateau separation)					-	30,000,000	30,000,000
Total	(33,467,124)	(5,316,308)	2,430,011	(2,458,570)	(38,811,991)	30,000,000	(8,811,991)