

Schedule of The City of Calgary Resiliency 2014 Projects for Alberta Community Resiliency Program

City of Calgary ACRP Projects - 2014 Prioritized as Hard Mitigation, Critical Infrastructure and Public Safety

Project ID	Business Unit	Project Title	Project Summary	Capital Program #	City Cost Share (000's)	ACRP Request (000's)	Priority (1-10)
BU - #			Brief Description			Current Budget (Resiliency Component Budget)	
WR-02d	UEP - Water	Glenmore Dam - elevated hoists for flood gates	<p>The City plans to undertake major retrofits to the Glenmore Dam, in part as necessary lifecycle maintenance, and in part to add new resiliency components that will improve The City's capacity to mitigate floods and manage winter water supply. The project will be undertaken during 2015-2017. The City is requesting ACRP funds so an elevated hoist system can be included in the retrofits, allowing additional flood storage and winter water supply storage.</p> <p>Phase 1 (\$12 M, 2014-2015): Critical water and gas mains will be relocated so they do not cross the Glenmore Dam</p> <p>Phase 2 (\$30 M, 2015-2017): Replacement of existing deteriorated wooden stop logs with a more robust steel gates will reduce flood damage downstream and permit maximum Glenmore Reservoir storage through winter season, effectively doubling winter water storage capacity.</p> <p>Phase 3 (elevated hoists): (\$10 M, 2015-2017): An elevated hoist system will allow easier maintenance of the gates and the possibility of installing larger gates at a future time, increasing potential water storage in the reservoir for water supply and flood mitigation.</p> <p>Phase 4 (\$29.8 M, 2015-2017): As part of replacing the stop logs, the bridge deck will be replaced, and structural modifications will be performed to accommodate higher reservoir levels</p>		2,400	10,000	1
WR-13	UEP - Water	Heritage Drive permanent flood barrier	A 550 m long permanent flood dyke adjacent to the river to protect to the 1:100 year flood event (+0.5 m freeboard) will enhance flood protection of this important access and egress route that is currently impacted at a 1:10 event. Will prevent overland flow on Heritage Drive at the Glenmore Trail Underpass during a 1:100 year flood event on the Bow River		840	4,800	2
WR-09	UEP - Water	Centre Street Bridge lower deck flood barrier improvements	Two self raising barriers at the onramp to the lower deck of Centre Street Bridge to protect to the 1:100 year flood event (+0.5 m freeboard) will enhance flood protection in this area. Will prevent inundation of 14 ha (approximately 50 high density buildings) of downtown during a 1:100 year flood event.		170	1,700	2
WR-03b	UEP - Water	Sunnyside Pump Station #1	A new pump station to help dewater community during high river events. This will be located at the lowest elevation in the drainage area and take the overflow from other pump stations		600	4,000	3
WR-04b	UEP - Water	Stormwater outfall improvements - gates	Installation of gates on stormwater outfalls to prevent backflow from the river during high river events		200	2,000	3
CPB-03a	CPB	Electrical Panel Program	Municipal Complex and Old City Hall Relocation of electrical switch that distributes emergency generator power. This ensures emergency power is uninterrupted, allows building functions to be maintained and reduces public safety risk..	937 (additional 600 prev funded by FSR)	30	300	4
CPB-01d	CPB	Municipal Complex Site Drainage Program	Weeping Tile around Municipal Building Complex to channel and remove rising groundwater from the building foundations.		245	2450	4
CPB-01a	CPB	Municipal Complex Site Drainage Program	Remove the water in holding basins at a rate that matches or exceed the flow rate of water entering the building and accumulating in the holding basin's This is necessary to ensure capacity remains for water containment. During the 2013 flood building were flooded because sumps were overwhelmed.	937 (additional 550 prev funded by FSR)	80	800	4
T-16	Trans - TI	Elbow River Pedestrian Bridges - Resiliency Components	Project work is composed of the resiliency components of Sandy Beach, Riverdale Ave, Rideau Park pedestrian bridges damaged by June flood. Resiliency components are proposed for ACRP Funding to support project completion. This project have been approved under the DRP and FREC programs but requires additional funds to ensure resiliency components are included to minimize the need for flood related infrastructure repairs.	949	250	2,500	5

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ENMAX	ENMAX	P-59	Enmax 32 Substation Bow River Crossings. Flood resilience of Enmax infrastructure crossing the Bow River at Substation32 (Serving South Calgary Communities)		1230	6,100	6
ENMAX	ENMAX	P-64	Enmax Downtown District Energy Facility. Improve resiliency of infrastructure supplying heat to downtown businesses and residences.		100	1,000	6
ENMAX	ENMAX	P-65	Enmax 05 Substation Hardening. Flood-proof Enmax 05 Substation to limit the impact of flooding on the electricity supply of downtown businesses and residences.		240	2,400	6
WR-12	UEP-Water	Deerfoot Trail permanent flood barrier	Two separate dykes (total 250m long) adjacent to Nose Creek to protect to the 1:100 year flood event (+0.5m freeboard) will enhance flood protection of this critical access and egress route. Will prevent overland flow on Deerfoot Trail and Beddington and 64th Ave during a 1:100 year flood event on Nose Creek.		110	1,100	7
WR-14	UEP - Water AND COPS - Parks	Riparian Health Restoration - multiple sites	Riparian restoration (design, construction, maintenance) activities in: - Southland Park / Sue Higgins Park, including central wetland and identified degraded hotspot at south end - Lindsay Park (downstream from sites addressed in 2014) - Douglasdale Park, including scoured areas near ball diamonds (planned for 2014) and shorelines throughout park - Inglewood Bird Sanctuary (Jeffries Pond) - West Nose Creek / Confluence Park - South Highfield site - right bank of Bow River		268	2680	8
				Project Totals	6,763	41,830	