City of Richmond

Report to Committee

To:	General Purposes Committee	**Date:**	August 19, 2022
From:	Milton Chan, P.Eng. Director, Engineering	**File:**	10-6060-01/2022-Vol 01
Re:	**UBCM Community Emergency Preparedness Fund: 2022 Disaster Risk Reduction – Climate Adaption Grant Application**		

Staff Recommendation

1. That the application to the Community Emergency Preparedness Fund, Disaster Risk Reduction – Climate Adaptation funding stream as outlined in the staff report titled "UBCM Community Emergency Preparedness Fund: 2022 Disaster Risk Reduction – Climate Adaption Grant Application" dated August 19, 2022 from the Director, Engineering be endorsed; and

2. That should the funding application be successful, the Chief Administrative Officer and the General Manager, Engineering and Public Works, be authorized on behalf of the City to negotiate and execute funding agreements with UBCM for the above mentioned projects and that the Consolidated 5 Year Financial Plan (2022-2026) be amended accordingly.

Milton Chan, P.Eng.
Director, Engineering
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REPORT CONCURRENCE		
ROUTED TO:	**CONCURRENCE**	**CONCURRENCE OF GENERAL MANAGER**
Intergovernmental Relations	☑	
Finance	☑	
Public Works	☑	
SENIOR STAFF REPORT REVIEW	**INITIALS:**	**APPROVED BY CAO**

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Staff Report

Origin

The Community Emergency Preparedness Fund (CEPF) is a suite of funding programs intended to enhance the resilience of communities in responding to emergencies. The Disaster Risk Reduction – Climate Adaptation funding stream through CEPF is currently accepting applications until September 30, 2022 for projects that are aimed at reducing risk from future disasters due to natural hazards and climate-related risks. This report responds to this grant opportunity.

This grant application requires a Council resolution indicating support for the proposed projects, as well as willingness to provide overall grant management. The purpose of this report is to seek Council approval to submit a grant application to the 2022 UBCM Disaster Risk Reduction – Climate Adaptation funding stream.

This report supports the following strategies within Council's Strategic Plan 2018-2022:

Strategy #1 A Safe and Resilient City:

> *Enhance and protect the safety and well-being of Richmond.*
>
> *1.2 Future-proof and maintain city infrastructure to keep the community safe.*

Strategy #5 Sound Financial Management:

> *Accountable, transparent, and responsible financial management that supports the needs of the community into the future.*
>
> *5.1 Maintain a strong and robust financial position.*
>
> *5.4 Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.*

Analysis

Richmond is situated approximately 1.0 meter above sea level and flood protection is integral to protecting the health, safety and economic viability of the City. Richmond is protected from flooding by an extensive network of drainage and diking infrastructure, with a replacement value (2022 dollars) of $2.2B. The City's Flood Protection Management Strategy and Dike Master Plans are the guiding framework for continual upgrades and improvements to address climate change induced sea level rise. At the April 12, 2021 Regular Council meeting, Council endorsed a target annual revenue level of $30 million by 2031 in order to support a 50 year implementation period for an accelerated flood protection program for upgrading the City's flood protection. The Flood Protection Management Strategy identifies senior government partnerships as a top priority.

Community Emergency Preparedness Fund

Funding for the CEPF is provided by the Province of BC and is administered by the Union of BC Municipalities (UBCM). The Disaster Risk Reduction – Climate Adaptation (DRR-CA) funding stream is a part of the CEPF and is intended to support communities in reducing risk from future disasters due to natural hazards and climate-related risks. Funding for the DRR-CA is divided into three categories. Staff have identified projects that would be appropriate for each category, as summarized in Table 1. The DRR-CA funding stream can contribute 100% of the cost of eligible activities to a maximum amount. Projects must be completed within two years of notification of funding approval to be eligible for grant funding.

Table 1 – Proposed Projects for DRR-CA Application

Funding Category	**Grant Maximum**	**Proposed Project**
Category 1: Foundational Activities (risk mapping, risk assessments, planning)	$150,000	Flood Risk Hydrodynamic Modelling
Category 2: Non-structural activities	$150,000	Flood Protection System Emergency Reconstruction Strategy
Category 3: Small scale structural activities	$2 million	Drainage Pump Station Climate Adaptation and Resilience Upgrades

The Flood Risk Hydrodynamic Modelling project is an action identified by the City's Flood Protection Management Strategy to help assess flood risks and impacts within the City and to inform needs around updating the City's policies on flood construction levels.

The City's Flood Protection Management Strategy identifies a combined frequency approach for determining earthquake and flood risk levels for the City's dikes. This is in alignment with the Seismic Assessment and Seismic Design of Dikes in British Columbia, which was published by the Engineers and Geoscientists BC in 2021. The Flood Protection System Emergency Reconstruction Strategy supports the City's strategic approach towards seismic flood hazard management.

The Drainage Pump Station Climate Adaptation and Resilience Upgrades involves increasing the capacity of select drainage pump stations throughout the City to meet increasing demands from climate change, and installing generators to improve the drainage system's resilience in an emergency.

The deadline for applications is September 30, 2022. The application guidelines require a Council resolution supporting any submissions for funding under this program. Staff are requesting Council's endorsement of the submission of the above proposed projects.

Financial Impact

The Flood Risk Hydrodynamic Modelling and Flood Protection System Emergency Reconstruction Strategy projects have funding in place through an existing approved 2022 capital projects. Should the City be successful with these grant applications, these funds will be used to offset the previously approved City funding. Should the Drainage Pump Station Climate Adaptation and Resilience Upgrades project application be successful, a capital project will be created based on the approved grant amount.

Should the City be successful with the grant applications, the Consolidated 5 Year Financial Plan (2022-2026) will be amended accordingly.

Conclusion

Grant funding opportunities are available through the CEPF to support municipalities and communities in reducing risk from future disasters due to natural hazards and climate-related risks. Staff recommend that applications be submitted for the Flood Risk Hydrodynamic Modelling, Flood Protection System Reconstruction Strategy, and Drainage Pump Station Climate Adaptation and Resilience Upgrades projects. These projects align with the grant program guidelines and supports the City's Flood Protection Management Strategy.

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