



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** September 13 2024
From: Milton Chan, P.Eng.
 Director, Engineering **File:** 10-6000-01/2024-Vol 01
Re: **UBCM Community Emergency Preparedness Fund: 2024/25 Disaster Risk Reduction – Climate Adaptation Grant Applications**

Staff Recommendations

1. That the application(s) 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: 2024/25 Disaster Risk Reduction – Climate Adaptation Grant Applications” dated September 13, 2024 from the Director, Engineering, be endorsed;
2. That should the grant application(s) be successful, the Chief Administrative Officer and the General Manager, Engineering and Public Works, be authorized to execute funding agreements with UBCM on behalf of the City for the Drainage Pump Station Condition Assessment, Flood Protection and Rain Gauge Monitoring Stations, and Blundell Road Canal Improvement projects; and
3. That should the grant application(s) be successful, capital projects of \$150,000 for the Drainage Pump Station Condition Assessment, \$150,000 for Flood Protection and Rain Gauge Monitoring Stations, and \$5,000,000 for Blundell Road Canal Improvement be approved with 100% funding from the external grant, as outlined in the staff report titled “UBCM Community Emergency Preparedness Fund: 2024/25 Disaster Risk Reduction – Climate Adaptation Grant Applications” dated September 13, 2024 from the Director, Engineering, and be included in the Consolidated 5 Year Financial Plan (2025-2029) accordingly.

Milton Chan, P.Eng.
 Director, Engineering
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REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Intergovernmental Relations	<input checked="" type="checkbox"/>	
Finance	<input checked="" type="checkbox"/>	
Public Works	<input checked="" type="checkbox"/>	
Climate and Environment	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO
PWT – 31		

Staff Report

Origin

The Community Emergency Preparedness Fund (CEPF) is a collection of provincially funded programs that are intended to enhance the resilience of communities in responding to emergencies. The Union of BC Municipalities (UBCM) is currently accepting grant applications under the Disaster Risk Reduction – Climate Adaptation (DRR-CA) funding stream of the CEPF for projects that are aimed at reducing risks from future disasters due to natural hazards and climate change-induced risks. This report responds to this grant opportunity.

Grant applications under this funding stream require a Council Resolution that indicates support for the proposed projects. The purpose of this report is to seek Council endorsement for three grant applications to the 2024/25 UBCM Disaster Risk Reduction – Climate Adaptation funding stream.

The deadline for submission of the grant applications is October 4, 2024. As such, staff have prepared and submitted applications for the projects described in this report. Should Council choose not to endorse any of these submissions, staff will contact UBCM to withdraw the application(s).

This report supports Council's Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

Community safety and preparedness through effective planning, strategic partnerships and proactive programs.

3.1 Advance proactive, sustainable, and accelerated flood protection in collaboration with other governments and agencies.

3.3 Ensure the community is collectively prepared for emergencies and potential disasters.

3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.

This report supports Council's Strategic Plan 2022-2026 Focus Area #4 Responsible Financial Management and Governance:

Responsible financial management and efficient use of public resources to meet the needs of the community.

4.1 Ensure effective financial planning to support a sustainable future for the City.

4.4 Work with all levels of governments for grant and funding opportunities.

Analysis

Richmond continues to invest in its extensive network of flood protection infrastructure, which is integral to protecting the health, safety, and economic viability of the City. Predicted climate change impacts on weather patterns and sea level rise reinforce the need for continual upgrades to the City’s flood protection infrastructure. The City’s Flood Protection Management Strategy and Dike Master Plans are the guiding framework for the advancement of flood protection upgrades. 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 UBCM. The Disaster Risk Reduction – Climate Adaptation funding stream is a part of the CEPF and is intended to support communities in reducing the risk of future disasters due to natural hazards and climate-related risks. This funding stream is comprised of three separate project categories that will be evaluated and awarded individually. Staff have identified projects that would be appropriate for each category, as summarized in Table 1. The fund can contribute 100% of the cost of eligible activities up to a maximum amount. Projects are required to be completed within two years of notification of funding approval.

Table 1 – Proposed Projects for Disaster Risk Reduction – Climate Adaptation Fund Application

Funding Category	Grant Funding Requested	Proposed Project
Category 1: Foundational Activities (Risk Mapping, Risk Assessments, Planning)	\$150,000	Drainage Pump Station Condition Assessment
Category 2: Non-structural Activities	\$150,000	Flood Protection and Rain Gauge Monitoring Stations
Category 3: Small-scale Structural Activities	\$5,000,000	Blundell Road Canal Improvement

The Drainage Pump Station Condition Assessment project (Category 1), includes the assessment of the structural and operational components of the City’s 39 drainage pump stations. This project will identify and prioritize rehabilitation, replacement, and long-term funding requirements necessary to improve the City’s drainage pump stations. Regular maintenance at pump stations is performed on an on-going basis; the scope of this project takes a proactive approach beyond regular maintenance work, in order to manage these assets effectively and plan future requirements. The results will inform the City’s capital planning process, thereby strengthening the City’s proactive flood management approach.

The Flood Protection and Rain Gauge Monitoring Stations project (Category 2), involves the procurement and installation of rain gauges and level sensors, to monitor the intensity of rainfall events and the performance of the City’s flood protection infrastructure. The proposed rain gauges and level sensors will supplement the City’s current inventory, which will help identify areas of concern during significant events, improve reliability, and decrease the cost and disruption of unplanned maintenance and emergency repairs to the City’s flood protection infrastructure. This is a

cost effective way to increase the City’s ability to prepare for, respond to, and predict extreme climate events.

The Blundell Road Canal Improvements project (Category 3), includes upgrades to the canal along the north and south side of Blundell Road between Sidaway Road and No. 6 Road. The upgrades will increase flood conveyance capacity by removing blockages along the canal and increasing the storage volume of the canal. The canal is also classified as a channelized watercourse within the City’s Riparian Management Area network. Prior to commencing, staff will obtain a qualified environmental professional to support project planning and to oversee construction, monitoring, and restoration activities. As part of the City’s ongoing asset management program, a number of canals have been identified for upgrades based on the condition of the canal, potential road safety issues due to sloughing canal banks, and flood conveyance concerns. The Blundell Road location is high priority based on field observations.

Financial Impact

Should the City be awarded the grant(s), staff recommend that the capital projects outlined in Table 2 be approved and that they be included in the Consolidated 5 Year Financial Plan (2025-2029) accordingly. There is no operating budget impact related to the capital projects.

Table 2 – Proposed Capital Projects Should the City’s Grant Application(s) be Successful

Project	Budget
Drainage Pump Station Condition Assessment	\$150,000
Flood Protection and Rain Gauge Monitoring Stations	\$150,000
Blundell Road Canal Improvement	\$5,000,000

If the City’s grant application(s) are unsuccessful, staff will submit the capital projects for Council’s consideration through the future budget process.

Conclusion

Grant funding opportunities are available through the CEPF to support municipalities and communities in reducing the risk of future disasters due to natural hazards and climate-related risks. Staff recommend that applications be submitted for the Drainage Pump Station Condition Assessment, Flood Protection and Rain Gauge Monitoring Stations, and Blundell Road Canal Improvement projects. These projects align with the grant program guidelines and support the City’s Flood Protection Management Strategy.



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