



City of Richmond

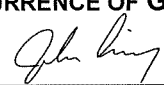
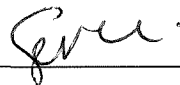
Report to Committee

To: Public Works and Transportation Committee **Date:** January 24, 2023
From: Milton Chan, P.Eng.
Director, Engineering **File:** 10-6060-01/2023-Vol
01
Re: **UBCM Community Emergency Preparedness Fund: 2022/23 Disaster Risk
Reduction – Climate Adaptation 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: 2022/23 Disaster Risk Reduction – Climate Adaptation Grant Application” dated January 24, 2023 from the Director, Engineering be endorsed;
2. That should the grant 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
3. That should the grant application be successful, capital projects of \$150,000 for Seepage Assessment and Management Strategy, \$150,000 for Flood Protection Monitoring Stations, and \$2,000,000 for No. 3 Road Canal Improvements be approved with funding from external grant, as outlined in the staff report titled “UBCM Community Emergency Preparedness Fund: 2022/23 Disaster Risk Reduction – Climate Adaptation Grant Application” dated January 24, 2023 from the Director, Engineering, and that the Consolidated 5-Year Financial Plan (2023-2027) be amended accordingly.


Milton Chan, P.Eng.
Director, Engineering
(604-276-4377)

REPORT CONCURRENCE		
ROUTED TO: Intergovernmental Relations Finance Public Works	CONCURRENCE ☒ ☒ ☒	CONCURRENCE OF GENERAL MANAGER 
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

The Community Emergency Preparedness Fund (CEPF) is a collection of funding programs intended to enhance the resilience of communities in responding to emergencies. The Disaster Risk Reduction – Climate Adaptation funding stream through the CEPF is currently accepting applications until February 24, 2023 for projects that are aimed at reducing risks 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 a willingness to provide overall grant management. The purpose of this report is to seek Council approval to submit a grant application to the 2022/23 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 continues to make investments 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 local weather patterns and sea level rise reinforce the need for continual upgrades to our flood protection infrastructure to address changing needs. 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 the Union of BC Municipalities (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 must be completed within two years of notification of funding approval to be eligible for grant funding.

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

Funding Category	Grant Maximum	Proposed Project
Category 1: Foundational activities (risk mapping, risk assessments, planning)	\$150,000	Seepage Assessment and Management Strategy
Category 2: Non-structural activities	\$150,000	Flood Protection Monitoring Stations
Category 3: Small scale structural activities	\$2 million	No. 3 Road Canal Improvement

The Seepage Assessment and Management Strategy project will assess the impacts of seepage related to sea level rise and develop strategies to mitigate the potential impacts on Richmond's flood protection infrastructure. This project will support long-term climate adaptation planning and recommendations for future work related to flood protection.

The Flood Protection Monitoring Stations project involves upgrading and installing river level sensors, box culvert level sensors and canal level sensors to monitor the performance of the City's flood protection infrastructure. The proposed sensors will supplement the City's current inventory of flood protection level sensors, which help identify areas of concern during significant events, improve reliability and decrease the cost and disruption of unplanned maintenance and emergency repairs. This is a cost effective way to increase the City's ability to prepare for, respond to, and predict extreme climate events.

The No. 3 Road Canal Improvement project involves upgrades along the No. 3 Road canal south of Steveston Highway to increase conveyance capacity. The No. 3 Road drainage catchment had been identified in significant rain events as requiring drainage upgrades. This project will support the newly constructed No. 3 Road and Steveston Highway drainage pump station to improve drainage within the No. 3 Road drainage catchment and reduce local flood risks due to drainage ditch blockages, safety issues, and environmental disturbance.

Financial Impact

Should the City be awarded the grant, staff recommend that the capital projects as outlined in Table 2, be approved and that the Consolidated 5 Year Financial Plan (2023-2027) be amended accordingly. The estimated operating budget impact (OBI) identified in Table 2 will be considered as part of the annual budget process.

Table 2 – Proposed Capital Projects should the City’s Grant Application be Successful

Project	Budget	OBI
Seepage Assessment and Management Strategy	\$150,000	\$0
Flood Protection Monitoring Stations	\$150,000	16,958
No. 3 Road Canal Improvement	\$2,000,000	\$0

If the City’s grant application is unsuccessful, staff will submit the capital projects for Council’s consideration through future budget processes.

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 Seepage Assessment and Management Strategy, Drainage System Sensor Installation, and No. 3 Rd Canal Improvement projects. These projects align with the grant program guidelines and support the City’s Flood Protection Management Strategy.



Eric Sparolin, P.Eng
Manager, Engineering Planning
(604-247-4915)



Beata Ng, P.Eng.
Project Manager, Engineering Planning
(604-204-8674)