

# Report to Council



**Date:** November 23, 2020  
**To:** Council  
**From:** City Manager  
**Subject:** UBCM Community Emergency Preparedness Fund (CEPF) - Structural Flood Mitigation Program Application – Old Vernon Road Mill Creek Crossing  
**Department:** Infrastructure Engineering

---

## **Recommendation:**

THAT Council receives for information, the report from Infrastructure Engineering dated November 23, 2020, with respect to the UBCM Community Emergency Preparedness Fund (CEPF) - Structural Flood Mitigation Program Application – Old Vernon Road Mill Creek Crossing;

AND THAT Council authorizes staff to apply for a UBCM CEPF Structural Flood Mitigation grant as outlined in this report;

AND THAT Council authorizes the Mayor and City Clerk to execute the UBCM CEPF Structural Flood Mitigation grant, if the application is successful;

AND FURTHER THAT the 2021 Financial Plan be amended to include the grant funding for the Old Vernon Road Mill Creek Crossing if the application is successful.

## **Purpose:**

To consider staff's recommendation to apply for a UBCM Community Emergency Preparedness Fund – Structural Flood Mitigation Program Grant.

## **Background:**

Mill Creek flows under Old Vernon Road at a bridge crossing just upstream of the Kelowna International Airport. During the 2017 freshet, the high flow event resulted in high water and debris flow that damaged and blocked the culverts under Spencer Road, just upstream of Old Vernon Road. The resulting flooding and breach at Spencer Road eroded the channel downstream, also resulting in debris accumulation and erosion at the bridge crossing at Old Vernon Road. Since that time, the culverts at Spencer Road have been replaced with a new, much larger capacity arch culvert with similar grant funding.

Following a risk analysis of the various bridges and creek crossings in the City, it was determined that this bridge crossing is now the next weakest link and does not have the hydraulic capacity to safely pass the new 200 year storm event or a debris flow event. Old Vernon Road is a busy access to rural areas along the City's north and east boundary and near the airport.

Bridge condition assessment identified the Old Vernon Road bridge crossing as a high priority, as the bridge is undersized to withstand major flood events and is approaching the end of its design life. This work is in concert with other projects required to manage several flood impacts along the Mill Creek Corridor.

As part of the application, the City has included recent relevant work into the application:

- Bridge Condition Inspections and Structural Assessments (2018 and 2019) by Associated Engineering.
- Mill Creek 2017 Flood Recovery Assessment Internal Report by Dobson Engineering Ltd., and
- Old Vernon Road Bridge and Culvert Replacement - Design Criteria providing a concept design and costing information for the culvert replacement.

All work will be done with a high sensitivity to fisheries impacts with appropriate mitigation conducted at all times. This will be done by qualified professionals hired as part of the project.

As part of the application process, a Council resolution is required indicating support for the current proposed activities and willingness to provide overall grant management.

**Internal Circulation:**

Divisional Director, Infrastructure  
Financial Planning Manager  
Grants & Special Projects Manager  
Infrastructure Engineering Manager  
Utility Services Manager

**Financial/Budgetary Considerations:**

The City is requesting a \$750,000 grant from the UBCM Community Emergency Preparedness Fund – Structural Flood Mitigation Program. The Structural Flood Mitigation funding stream can contribute a maximum of 100% of the cost of eligible activities to a maximum of \$750,000. If the application is successful, the next step would be to prepare the detailed design used to tender the project. Upon completion of the detailed design, if it is determined that the cost of the project will be greater than the grant award, then the remaining costs will be considered for funding from the Mill Creek Flood Protection Project, to be submitted as part of the 2021 provisional budget.

**Considerations not applicable to this report:**

Existing Policy:  
Legal/Statutory Authority:  
Legal/Statutory Procedural Requirements:  
Personnel Implications:  
External Agency/Public Comments:  
Communications Comments:  
Alternate Recommendation:

Submitted by:  
Rod MacLean, P.Eng. Utilities Planning Manager

**Approved for inclusion:**

A square box containing a handwritten signature in black ink, which appears to be 'A. Newcombe'.

A. Newcombe, Infrastructure Divisional Director

cc: Divisional Director, Corporate Strategic Services  
Divisional Director, Financial Services  
Divisional Director, Infrastructure  
Financial Planning Manager  
Infrastructure Engineering Manager  
Utility Services Manager  
Grants & Special Projects Manager