

## Community Emergency Preparedness Fund

# Structural Flood Mitigation

## 2019 Program & Application Guide (September 2019)

### 1. Introduction

The [Community Emergency Preparedness Fund](#) (CEPF) is a suite of funding programs intended to enhance the resiliency of local governments, First Nations and communities in responding to emergencies. Funding is provided by the Province of BC and is administered by Union of BC Municipalities (UBCM).

Starting in May 2019, the funding streams include:

- Indigenous cultural safety and cultural humility training
- Emergency operations centres and training
- Emergency support services
- Evacuation route planning
- Flood risk assessment, flood mapping and flood mitigation planning
- Structural flood mitigation
- Volunteer and composite fire departments equipment and training

### Background

Flooding is a significant natural hazard in BC that can damage important infrastructure, cause serious economic losses, and create social disruption. Flooding in BC is often due to:

- Climatic conditions – intense rainfall, rain on snow, ice jams, rapid snowmelt, storm surges, etc.
- Geomorphic processes – debris flows, tsunamis, landslides
- Structural failures – dike failure, dam failure, culvert failure

Additionally, climate change will impact the frequency and magnitude of flooding in BC through changes to precipitation patterns and sea level rise. It is estimated that sea levels along the coastline will increase by approximately 1m by the year 2100 (Ausenco Sandwell 2010).

Therefore, it is important for communities to understand the flood hazards they face and how to adapt to these risks.

### Structural Flood Mitigation Program Funding Stream

The intent of this funding stream is to support eligible applicants to prevent, eliminate or reduce the impacts of hazards through construction of structural flood mitigation projects. Ongoing operational and maintenance costs are not eligible.

### 2. Eligible Applicants

All local governments (municipalities and regional districts) and all First Nations (bands and Treaty First Nations) in BC are eligible to apply.

Eligible applicants can submit one application per funding stream per intake.

### 3. Eligible Projects

In order to qualify for funding, applications must demonstrate the need for structural flood mitigation through the completion of appropriate risk assessments, flood maps and/or mitigation plans that are consistent with the outputs of the “2020 Flood Risk Assessment, Flood Mapping & Flood Mitigation Planning” component of the CEPF.

In addition, to qualify for funding, projects must be:

- A new project (retroactive funding is not available)
- Capable of completion by the applicant within two years from the date of grant approval
- Completed under the guidance of a qualified professional
- Eligible for required approvals, authorizations and permits to complete structural mitigation projects
- Completed to acceptable provincial standards, including:
  - [Provincial Flood Hazard Area Land Use Management Guidelines](#)
  - [Seismic Design Guidelines for Dikes](#) (if applicable)
  - [Dike Design & Construction Guidelines](#) (if applicable)

### 4. Eligible & Ineligible Costs & Activities

#### Eligible Costs & Activities

Eligible costs are direct costs that are approved by the CEPF Evaluation Committee, properly and reasonably incurred, and paid by the applicant to carry out eligible activities. Eligible costs can only be incurred from the date of application submission until the final report is submitted.

Eligible activities must be cost-effective and may include:

- Installation of structural flood protection works, or upgrades to existing structural flood protection works (e.g. pump stations, flood boxes, etc.)
- Construction of flood conveyance works (e.g. bypass channels)
- Placement of rip-rap to strengthen bank protection and/or to protect critical infrastructure from erosion
- Removal of sediment deposits from extreme landslide events, causing severe channel constrictions and/or aggradation resulting in overland flooding
- Retrofitting or major repairs to existing flood protection works (e.g. dikes and pump stations) and/or flood conveyance works (e.g. culverts)
- Geotechnical drilling in dikes and dike Rights of Way to determine dike foundation material characteristics (in advance of determining design and cost of dike upgrades)
- Improvement of performance or modernization of existing permanent structural flood mitigation works, including seismic upgrades to such works
- Installation of hydrometric stations to improve river forecasting and flood response (e.g. monitoring equipment)

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- Preparation of maps, spatial data, and metadata associated with the structural mitigation project (where applicable must meet Section 3.4 of [Flood Mapping in BC: APEGBC Professional Practice Guidelines V 1.0](#) and/or [Specifications for LIDAR for the Province of British Columbia](#))

and if applicable the [Specifications for the Production of Digital Elevation Models for the Province of British Columbia](#))

The following expenditures are also eligible provided they relate directly to the eligible activities identified above:

- Consultant costs
- Incremental applicant staff and administration costs
- Public information costs

### **Ineligible Costs & Activities**

Any activity that is not outlined above or is not directly connected to activities approved in the application by the CEPF Evaluation Committee is not eligible for grant funding. This includes:

- On-going operating and maintenance costs
- Preliminary planning and preliminary design activities
- Structural flood mitigation projects that would yield only temporary measures (e.g., use of sandbags, dredging)
- Structural flood mitigation projects intended to support future development in a flood plain
- Projects that create an “orphan structure” for which tenure and/or maintenance responsibility does not remain with the local authority
- Projects (or components) that address needs that are not related to flood prevention or flood mitigation
- Costs related to developing or submitting the application package

## **5. Grant Maximum**

The Structural Flood Mitigation funding stream can contribute a maximum of 100% of the cost of eligible activities to a maximum of \$750,000.00.

In order to ensure transparency and accountability in the expenditure of public funds, all other grant contributions for eligible portions of the project must be declared and, depending on the total value, may decrease the value of the grant.

## **6. Application Requirements & Process**

### **Application Deadline**

The application deadline is **October 25, 2019**. Applicants will be advised of the status of their application within 90 days of the application deadline.

### **Required Application Contents**

- Completed Application Form
- Local government Council or Board resolution, Band Council resolution or Treaty First Nation resolution, indicating support for the current proposed activities and willingness to provide overall grant management.
- Copies of any relevant mitigation planning documents or reports that support this project
- Detailed work plan and budget for each component identified in the application. This must include a breakdown of work activities, tasks, deliverables or products, resources, timelines (start and end dates), and other considerations or comments. The budget must clearly identify the CEPF funding request, applicant contribution, and/or other grant funding.
- Map(s) indicating the location of the proposed project and relation to the river and flood corridor, including:

- Existing flood protection works (e.g., dikes, pump stations, flood boxes, drainage ditches, culverts, bank protection, etc.)
- Access roads
- Critical infrastructure (e.g., water, sewer, gas, electricity, communication, etc.)
- Residential, commercial and industrial sites, etc.

## Submission of Applications

Applications should be submitted as Word or PDF files. If you choose to submit your application by e-mail, hard copies do not need to follow.

All applications should be submitted to:

Local Government Program Services, Union of BC Municipalities

E-mail: [cepf@ubcm.ca](mailto:cepf@ubcm.ca)

Mail: 525 Government Street, Victoria, BC, V8V 0A8

## Review of Applications

UBCM will perform a preliminary review of applications to ensure the required application elements (identified above) have been submitted and to ensure that basic eligibility criteria have been met. Only complete application packages will be reviewed.

Following this, Emergency Management BC will assess and score all eligible applications as part of a technical review process. Higher application review scores will be given to applications that:

- Are from communities not funded as part of the 2018 Structural Flood Mitigation intake
- Demonstrate scope and rationale that are clearly linked to addressing a priority risk in a strategic and comprehensive manner (such as completed flood risk assessments, flood maps, and/or flood mitigation plans)
- Outline any potential implementation risks and explain what mitigation measures are in place to address them (e.g., staffing capacity, procurement, severe weather, fisheries, rights-of-way)
- Contribute to a comprehensive, cooperative and regional approach to flood mitigation
- Identify stakeholders and partnerships, as appropriate to the project, and outline their level of engagement and commitment to the project
- Are from applicants that have implemented asset management practices that support the lifecycle maintenance planning of structural flood protection assets and are consistent with [Asset Management for Sustainable Service Delivery: A BC Framework](#)
- Outline the extent to which the project will prevent, eliminate or reduce the impacts of hazards, and reduce disaster-related financial liabilities (e.g., Disaster Financial Aid (DFA) claims)
- Consider and adapt to the impacts of climate change, including anticipated future hydrologic conditions, in the project methodology and deliverables
- Align with non-structural work, such as amendments to floodplain zoning bylaws and land use planning updates and aligns with the [Provincial Flood Hazard Area Land Use Management Guidelines](#)
- Are cost-effective and shovel-ready with detailed, complete budgets
- *Updated September 2019* - Demonstrated awareness of the regulatory approvals that are required with evidence thereof (List of required approvals, letters of support from regulators, and/or stakeholders, etc.)

Point values and weighting have been established within each of these scoring criteria. Only those applications that meet a minimum threshold point value will be considered for funding. The CEPF Evaluation Committee will consider the provincial and regional distribution of all proposed projects. Funding decisions will be made on a provincial priority basis.

All application materials will be shared with the Province of BC

## **Grant Management & Applicant Responsibilities**

Grants are awarded to eligible applicants only and, as such, the applicant is responsible for completion of the project as approved and for meeting reporting requirements.

Applicants are also responsible for proper fiscal management, including maintaining acceptable accounting records for the project. UBCM reserves the right to audit these records.

## **Notice of Funding Decision & Initial Payments**

All applicants will receive written notice of funding decisions. Approved applicants will receive an Approval Agreement, which will include the terms and conditions of any grant that is awarded, and that is required to be signed and returned to UBCM.

Grants are awarded in two payments: 50% when the signed Approval Agreement is returned to UBCM and 50% when the project is complete and the final reporting requirements have been met.

Please note that in cases where revisions are required to an application, or an application has been approved in principle only, the applicant has 30 days from the date of the written notice of the status of the application to complete the application requirements. Applications that are not completed within 30 days may be closed.

## **Post Grant Approval Meeting**

As a condition of grant approval, all approved applicants may be required to meet with Emergency Management BC and/or the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (e.g., GeoBC, Deputy Inspector of Dikes for the region), or designate, to discuss the project prior to commencing work.

## **Changes to Approved Projects**

Approved grants are specific to the project as identified in the application, and grant funds are not transferable to other projects. Approval from the CEPF Evaluation Committee will be required for any significant variation from the approved project.

To propose changes to an approved project, approved applicants are required to submit:

- Revised application package, including updated, signed application form, updated budget and an updated resolution
- Written rationale for proposed changes to activities and/or expenditures

The revised application package will then be reviewed by the CEPF Evaluation Committee at the next scheduled meeting.

Applicants are responsible for any costs above the approved grant unless a revised application is submitted and approved prior to work being undertaken.

## **Extensions to Project End Date**

All approved activities are required to be completed within two years of approval. Under exceptional circumstances, an extension beyond this date may be requested in writing and is subject to approval by the CEPF Evaluation Committee.

## **7. Final Report Requirements & Process**

All funded activities must be completed within two years of notification of funding approval and all final reports are due within 30 days of project completion.

Applicants are required to submit an electronic copy of the completed final reports, including the following:

- Completed final report form

- Financial summary
- Copy of Final Technical Report (i.e. consultant's report) including where applicable, but not limited to: project details (location, background, scope, funding agency), design analyses and assumptions, construction details, field work considerations, as built drawings, recommendations on operation and maintenance of structural works, regulatory approvals received, etc.
- If applicable, digital shape files (x, y, z) of the completed, as built project to facilitate updating of the Provincial data base to include these works
- If applicable, full size PDF copies of all maps created as a result of the project
- If applicable, spatial data and metadata for all maps identified above. LiDAR and orthoimagery products data and derivative products acquired/produced with CEPF funding must meet [Specifications for LiDAR for the Province of British Columbia](#)
- Optional: photos and/or media directly related to the funded project

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### **Submission of Final Reports**

All final reports should be submitted to:

Local Government Program Services, Union of BC Municipalities

E-mail: [cepf@ubcm.ca](mailto:cepf@ubcm.ca)

Mail: 525 Government Street, Victoria, BC, V8V 0A8

### **Review of Final Reports**

UBCM will perform a preliminary review of all final reports to ensure the required report elements (identified above) have been submitted.

Following this, all complete final reports & deliverables will be reviewed by Emergency Management BC.

All final report materials will be shared with the Province of BC.

## **8. Additional Information**

For enquiries about the application process or general enquiries about the program, please contact:

Union of BC Municipalities  
525 Government Street  
Victoria, BC, V8V 0A8

E-mail: [cepf@ubcm.ca](mailto:cepf@ubcm.ca)

Phone: (250) 387-4470