



# STAFF REPORT TO COMMITTEE

**DATE OF REPORT** January 14, 2021

**MEETING TYPE & DATE** Regional Services Committee Meeting of January 27, 2021

**FROM:** Environmental Services Division  
Engineering Services Department

**SUBJECT:** National Disaster Mitigation Program Grant Application – Chemainus River Flood Mapping

**FILE:** 0540-20 RS

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## **PURPOSE/INTRODUCTION**

The purpose of this report is to obtain approval for an application to the National Disaster Mitigation Program (NDMP) for a grant for flood mapping on the Chemainus River.

## **RECOMMENDED RESOLUTION**

That it be recommended to the Board that a grant application in the amount of \$473,000 be submitted to the National Disaster Mitigation Program for updating flood mapping for the Chemainus River.

## **BACKGROUND**

Since 2004 flood mapping in BC has been the responsibility of local governments. Most provincial floodplain mapping is now several decades old and may not incorporate recent changes to river channels nor the increased intensity of rainfall projected due to climate change. The Environmental Services Division has recently completed updates to the flood mapping for several floodplains within the region, including Shawnigan Lake and portions of the Cowichan and Koksilah Rivers. A 2018 risk assessment suggested that the existing provincial flood mapping for Cowichan Lake was still reasonably accurate given climate projections.

The remaining floodplain in the region, the Chemainus River, was last mapped in 1991. As illustrated by the devastating flooding on the Chemainus River in February 2020, updated flood mapping to inform flood mitigation is urgently needed in this floodplain.

## **ANALYSIS**

The National Disaster Mitigation Program (NDMP) consists of federal and provincial grant funding for four streams of flood-related disaster mitigation. Generally one progresses through the streams in sequence, from risk assessment, through flood mapping, mitigation planning and finally small scale or non-structural mitigation. A preliminary risk assessment has been developed based on the February 2020 flood event, so the focus of this grant application is on updating the flood mapping for the Chemainus River floodplain.

The floodplain includes the lower portions of both the Chemainus River and Bonsall Creek watersheds and is within the boundaries of the Municipality of North Cowichan. First Nations Reserves from Halalt First Nation and Penelakut Tribe are located within the floodplain and suffered severe impacts during the 2020 flooding. The Cowichan Valley Regional District (CVRD) is partnering with the Municipality of North Cowichan and with the affected First Nations on this project.

The flood mapping phase is one critical component of an overall development of both integrated flood management strategies and responses, as well as a holistic watershed management plan which the Halalt First Nations has formally requested.

#### FINANCIAL CONSIDERATIONS

The NDMP provides 100% funding for eligible projects. The CVRD, North Cowichan, Halalt First Nation and the Ministry of Transportation and Infrastructure are committing \$37,500 worth of staff time as an in-kind contribution for project management, project meetings, etc. North Cowichan has also recently committed to supporting the development of both the Integrated Watershed Management plan and its key component, flood mapping.

#### COMMUNICATION CONSIDERATIONS

The updated flood maps will be made available to other local governments, First Nations, and to the public via the CVRD website. A multi organizational technical team will be supporting this program and will be made up of representatives from CVRD, North Cowichan, Halalt, Ministry of Transportation and Infrastructure and Mosaic.

#### STRATEGIC/BUSINESS PLAN CONSIDERATIONS

The updated flood mapping project supports the Strategic Focus Areas of Response to Climate Change and Excellence in Regional Land Use Planning.

#### GENERAL MANAGER COMMENTS

☐ Not Applicable

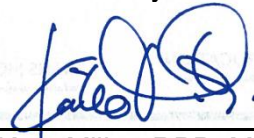
Referred to (upon completion):

- ☐ Communications & Engagement
- ☐ Community Services (*Cowichan Community Centre, Cowichan Lake Recreation, South Cowichan Recreation, Arts & Culture, Emergency Management, Facilities & Transit*)
- ☐ Corporate Services (*Finance, Human Resources, Legislative Services, Information Technology, Procurement*)
- ☐ Engineering Services (*Environmental Services, Recycling & Waste Management, Water Management*)
- ☐ Land Use Services (*Community Planning, Development Services, Inspection & Enforcement, Economic Development, Parks & Trails*)

Prepared by:

  
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Reviewed for form and content and approved for submission to the Committee:

Resolution:

Financial Considerations:

☒ Manager, Legislative Services

☒ Manager, Finance

**ATTACHMENTS:**

Attachment A –

Attachment B –