

Report to Council



Date: April 9, 2018
File: 1910-60
To: City Manager
From: Divisional Director, Infrastructure
Subject: 2018 Freshet Preparation

Recommendation:

THAT Council receives for information, the report from the Infrastructure Divisional Director dated April 9, 2018 regarding preparation for the 2018 Freshet;

AND THAT Council authorize the amendment of the 2018 Financial Plan for the 2018 Freshet Project up to \$100,000, funded from the flood control averaging reserve.

Purpose:

To provide Council with an understanding of projects completed, underway and anticipated in advance of the 2018 freshet, and to identify a funding source to initiate the anticipated works.

Background:

The 2017 spring freshet brought extreme flooding in early May and subsequent record high levels of Okanagan Lake. Staff brought forward a report in November, 2017, that identified 52 discrete locations that required repairs valued at approximately \$10.7 million. Work was initiated immediately and to date well over \$3 million has been expended on completed projects. One project of note was the work completed on Upper Vernon Creek. The creek construction work included the removal of approximately 2,600 tonnes of concrete, installation of more than 8,000-square-metres of channel bed liner, importing of 12,000 tonnes of rock riprap with boulders up to 5 feet in diameter and placement of 9,500 tonnes of native soils.

Creek channel capacity restoration projects continue to be the priority right now in anticipation of the freshet, which is the spring snowpack melt that fills creeks and streams.

Projects include:

- Gravel removal and erosion mitigation along Bellevue Creek
- Channel remediation on Upper Vernon Creek

- Vegetation removal along and within Mill Creek
- Reinstatement of capacity along Mill Creek

Several more projects of the original 52 are awaiting initiation. It is expected that the projects will be completed by 2019.

Current snowpack conditions within the Central Okanagan are above normal for this time of year. With cool spring conditions, the snowpack continues to increase and lower elevation snow has remained. We are closely monitoring all the flood factors with provincial departments, including snow pack, temperature and weather events. Advanced planning work includes extensive mapping to identify areas most prone to flooding in the event of higher than normal stream flows.

As a precautionary measure, staff are proposing to proactively institute flood prevention measures in specific areas along Mill Creek. These measures include employing sand bagging, bladder dams, Hesco bins or similar alternatives. Sand bags and sand will also be provided for private properties that have been identified at an increased risk due to potential high stream flows. Locations will be determined and publicized when available.

At this point in time, it has not been determined if Emergency Management British Columbia (EMBC) will be providing funding for these measures to be employed in response to the high flow risk. Therefore, funding is requested to initiate these projects in advance of the EMBC approval.

On a separate but related issue, the localized basement flooding some property owners are experiencing is the result of high groundwater or isolated low level snowmelt incidents. Private property owners are responsible for protecting their properties from possible high ground water damage. Anyone who has historically experienced wet basements or seepage should prepare accordingly.

Internal Circulation:

Divisional Director, Corporate Strategic Services
 Divisional Director, Financial Services
 Financial Planning Manager
 Fire Chief
 Infrastructure Operations Department Manager
 Project Manager, Flood Recovery
 Utilities Planning Manager

Financial/Budgetary Considerations:

The funding source for up to \$100,000 will be the flood control averaging reserve.

Should additional funding be required or funding not be available through EMBC, there is the potential need for additional funding that may be sourced from the contingency funding available in the Council approved 2017 Flood Mitigation project.

Considerations not applicable to this report:

Legal/Statutory Authority
 Legal/Statutory Procedural Requirements
 Existing Policy

Personnel Implications
External Agency/Public Comments
Communications Comments
Alternate Recommendation

Submitted by:

Alan Newcombe, P.Eng.
Divisional Director, Infrastructure

Approved for inclusion:



Joe Creron, Acting City Manager

cc Divisional Director, Financial Services
 Divisional Director, Corporate Strategic Services
 Fire Chief
 Infrastructure Operations Department Manager