



CITY OF HAMILTON
PUBLIC WORKS DEPARTMENT
General Manager's Office

TO:	Mayor and Members General Issues Committee
COMMITTEE DATE:	December 12, 2018
SUBJECT/REPORT NO:	Disaster Mitigation and Adaptation Fund (PW18097) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Raffaella Morello (905) 546-2424, Ext. 3926
SUBMITTED BY:	Dan McKinnon General Manager Public Works
SIGNATURE:	

RECOMMENDATION

- (a) That the projects listed in Appendix "A" to Report PW18097, totalling \$157.38 Million, be approved as the City of Hamilton's submission for consideration of the requested funding amount of \$62.952 Million for the period from 2019 to 2028, in accordance with the terms and conditions associated with Infrastructure Canada's Disaster Mitigation and Adaptation Fund;
- (b) That, should the City's submission for the Disaster Mitigation and Adaptation Fund (DMAF) program, be approved by Infrastructure Canada, staff be directed to report back to the General Issues Committee to seek approval of a financing strategy, inclusive of future tax supported levy increases, for the City's portion of approximately \$94.428 Million; related to eligible project costs between 2019 to 2028 (as outlined in Appendix "A" to Report PW1807), in accordance with the terms and conditions associated with the DMAF;
- (c) That the Mayor and City Clerk be authorized and directed to execute any funding agreement(s) and ancillary documents required for the City to receive funding for the projects listed in Appendix "A" to Report PW18097, through Infrastructure Canada's Disaster Mitigation and Adaptation Fund, in a form satisfactory to the City Solicitor; and,
- (d) That copies of Report PW18097, respecting the Disaster Mitigation and Adaptation Fund, be forwarded to local Members of Parliament.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

EXECUTIVE SUMMARY

The recommendations in this report are to seek Council approval of the City's application for the Government of Canada's Disaster Mitigation and Adaptation Fund (DMAF). Over the past decade, almost every jurisdiction in Canada has experienced significant weather-related events or disasters triggered by natural hazards. In 2018, the Government of Canada announced the launch of the DMAF which is a 10-year, \$2 billion national program to assist communities to better withstand current and future risks of climate change. DMAF will support large-scale infrastructure projects with a minimum cost of \$20 million. Eligible recipients for DMAF funding include Canadian provinces or territories, municipal/regional governments, authorized Canadian post-secondary institutions, not-for-profit organizations, and eligible Indigenous groups. For municipal projects, DMAF will fund 40% of the eligible costs for approved projects, with the remaining costs to be funded by the municipality.

Staff propose to submit applications in response to the DMAF funding program for capital projects as identified in Appendix A and related to improvements of the City's shoreline infrastructure, and drainage resilience for the City's storm-water management system. The summary of the proposed City projects for the DMAF submission is included in the analysis section of this report. These projects are identified in the City's ten-year Tax and Rate Capital Programs as outlined in Appendix "A" to Report PW18097, with two projects (Shoreline Protection and Installation of Back-flow Devices) not fully forecasted.

The deadline for applications is January 11, 2019. Approved projects must be completed by 2027-2028 to be eligible for funding. Project costs incurred prior to the DMAF project approval are not eligible for funding. An update will be provided to Council by mid-2019 on the status of Infrastructure Canada's review of Hamilton's DMAF applications.

Alternatives for Consideration – See Page 5

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: The potential funding contribution from the DMAF would enhance the City's ability to address built infrastructure such as shoreline related measures, bridges and culverts plus rehabilitation of the City's storm-water system. Total spending equates to \$157.38M of which \$94.428M is the City's share cash flowed over a 10 year period.

The majority of the proposed projects in Appendix A are currently in the City's 10-year Tax and Rate Capital forecasts; however, two projects are not included in the 10-year forecast as fully funded (Shoreline Protection and Backflow devices from Application 1). Approval of the recommendations in this report will result in the identified projects then

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

forming part of the 10-year capital forecast. Without funding from Infrastructure Canada, certain projects are deemed unaffordable.

Staffing: There are no staffing implications associated with the recommendations in this report.

Legal: The City will have to enter into a funding agreement to receive approved DMAF grants. The funding agreement will encompass the terms and conditions of the DMAF program.

HISTORICAL BACKGROUND

The focus of the DMAF is to provide support for large scale community projects which provide resiliency towards hazards associated with climate change. Climate change is impacting communities across the country and is contributing to natural hazards such as storms and floods with increasing frequency and intensity. These hazards have a significant impact on critical infrastructure such as water supply, sewer systems, buildings, and shorelines. Damage to critical infrastructure can result in interruptions in essential public services, cause health and safety risks, and is associated with high costs for recovery and rehabilitation.

The City of Hamilton has been subject to severe weather conditions which has caused significant damage to the City's infrastructure. Recent events included severe damage to the City's shoreline and flooding in several neighbourhoods. The City's aging infrastructure leaves the community at risk from future severe storm events.

The application process under DMAF consists of two phases including step 1 being the Expression of Interest (EOI) application, and step 2 being the full application. Staff submitted applications through the EOI process which were recently approved by Infrastructure Canada to proceed to step 2. Infrastructure Canada will be notifying applicants if they have been approved for funding through DMAF by the second quarter of 2019.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

N/A

RELEVANT CONSULTATION

- Corporate Services Financial Planning and Policy staff has reviewed and support this report's recommendations.
- Staff consultation will continue as part of the next steps to complete the DMAF application.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The information and recommendations in this report have City-wide implications related to the City's natural and built infrastructure which is at risk of damage associated with climate change.

The proposed list of projects for the City's submission is based on two separate applications. One application is for capital projects related to shoreline protection at a total value of \$31.85M. The second application is for capital projects with a combined value of approximately \$125.53M related to improvements for the resilience of the City's storm-water management system from extreme storms. The costs associated with both projects are over a ten-year period up to 2028.

Application 1 includes capital projects being coordinated by the Environmental Services and Hamilton Water Divisions, which include the following:

- Project 1 - Shoreline protection work that is required to rectify damage caused by storms in 2017 and 2018 and improve resilience for future extreme storm events.
- Project 2 - Installation of back-flow devices at several critical locations along Hamilton's sewer system outlets to prevent inflow infiltration from high lake levels as the result of extreme storm events.

Application 2 includes capital projects being coordinated by Hamilton Water, Engineering Services, and Energy, Fleet, and Facilities Divisions which are aimed at increasing resilience and minimizing the flood risk from future extreme storm events. These projects include the following:

- Project 1 - Implementation of Rosedale neighbourhood community flood mitigation strategy.
- Project 2 - Construction of the storm-water management system for the Ancaster Arts Centre (municipal building).
- Project 3 - Implementation of Churchill Park neighbourhood community flood mitigation strategy.
- Project 4 - Construction of new storm sewers for the separation of existing combined sewer in the Aberdeen-Hillcrest area.
- Project 5 - Escarpment stabilization work to rehabilitate the deterioration caused by extreme storm events.
- Project 6 - Construction and rehabilitation of various bridges and culverts to alleviate reported flooding from extreme storm events.
- Project 7 - Construction of a second drop-shaft from above the Niagara Escarpment at Fennell Avenue to Greenhill Avenue below the escarpment.

If successful in obtaining funding, the DMAF program would allow the City to make significant progress to reconstruct and build critical infrastructure which will protect the City's communities from future hazard events.

ALTERNATIVES FOR CONSIDERATION

City Council may consider submitting the funding request for both applications, one application, or decide not to submit either application.

It is likely that a number of projects currently in the 10 year forecast may be deemed unaffordable as priorities change as a result of future storms. The DMAF will assist in ensuring the city can be proactive in this regard.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

Built Environment and Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" – Disaster Mitigation and Adaptation Fund – List of Projects