

City of Saint John



Disaster Mitigation Adaptation Fund

Introduction

- In 2018 the City experienced a flooding event which resulted in a historic 5.8m flood level (nearly 1.6m above flood levels).
- This flood event caused significant damage to the municipal infrastructure such as sanitary sewer system back-up, electrical utility infrastructure and SeaWall (Coast Guard Site).
- Climate change resiliency is required in order for the City to protect vulnerable infrastructure that is susceptible to flooding.



Historic Flood 2018



121 Kennedy St. Kennedy St. (Lift Station)





Disaster Mitigation Adaptation Fund (DMAF)

- The Government of Canada announced a 10 year, \$2 billion national program designed to help communities strengthen their resilience against disasters triggered by natural hazards and extreme weather events.
- DMAF will support large-scale infrastructure projects with a minimum cost requirement of \$20 million and will provide 40% funding of costs for municipalities.
- The application process consisted of two intakes, the Expression of Interest and Full Application.
- The City was successful during the Expression of Interest and invited to submit a Full Application.
- Full Application was submitted on January 11, 2019.



Details of Project Submission

- Collaboration with all City services and Saint John Energy to identify the most vulnerable infrastructure associated with the effects of climate change due to flooding. Three projects were identified:
 - SeaWall Refurbishment (former Coast Guard Site)
 - Pumping Stations (Water and Wastewater)
 - Electrical Substations (Saint John Energy)
- Working with all service areas and Saint John Energy was invaluable in order to meet the minimum cost requirements of \$20 million.



SeaWall Refurbishment Project

- Refurbishment of SeaWall (former coast guard site): The SeaWall is a critical infrastructure for any existing and future development in the waterfront area.
- The SeaWall has experienced erosion and structural damages due to higher coastal water level.
- The intent is to reinforce the structure to address the flooding level to a 1-in-100-year event.
- Total Cost: \$8,173,008
- Federal Share of Cost: \$3,269,203
- City Share of Cost (General Fund): \$4,903,805



Pumping Stations (Water and Wastewater)

- Pumping Stations: Raise or replace critical municipal infrastructure (nine wastewater pumping stations and one water pumping station) above flood levels to avoid future damages from flooding and to provide continued critical services during flood.
- Total Cost: \$10,210,000
- Federal Share of Cost: \$4,084,000
- City Share of Cost (Utility Fund): \$6,126,000



Electrical Substations (Saint John Energy)

- Relocation of Critical Waterfront Electrical Utility Infrastructure (Smythe Street): The existing substations are vulnerable to sea level rise, with the risk of future storm events causing flooding, wave action and salt sprays with the potential to disrupt essential electrical services.
- Currently, this infrastructure serves more than 7,500 residents and 1,150 businesses, employing more than 25% of the regional workforce.
- Total Cost: \$11,407,176
- Federal Share of Cost: \$4,562,870
- Saint John Energy Share of Cost: \$6,844,306



Summary of Cash Flow Requirements

- Total costs submitted for the 3 projects is \$29.8 million
- Total Federal share of costs \$11.9 million (\$4.5 million for Saint John Energy and \$7.4 million for the City).
- The costs and associated cash flow impacts for the City are detailed below:

D.3 (Cash Flow) based on when reimbursement not when incurred	Federal share of cost for the City	City's share of cost	Total Costs
	-		
2018-2019 (April 1-March 31)	\$0	\$0	\$0
2019-2020 (April 1-March 31)	\$1,220,000	\$1,830,000	\$3,050,000
2020-2021 (April 1-March 31)	\$2,177,301	\$3,265,951	\$5,443,252
2021-2022 (April 1-March 31)	\$1,157,301	\$1,735,951	\$2,893,252
2022-2023 (April 1-March 31)	\$1,882,602	\$2,823,902	\$4,706,504
2023-2024 (April 1-March 31)	\$340,000	\$510,000	\$850,000
2024-2025 (April 1-March 31)	\$352,000	\$528,000	\$880,000
2025-2026 (April 1-March 31)	\$224,000	\$336,000	\$560,000
Total	\$7,353,203	\$11,029,805	\$18,383,008





- Notification of funding to be announced in Spring of 2019.
- Staff will provide information on results of application and awarding of funding.
- Staff will provide a report and recommendation to Finance Committee on the overall project and funding sources which will be based on results from the application.







