

Federation of Canadian Municipalities - Adaptation in Action Program

ISSUE

The Federation of Canadian Municipalities (FCM) is accepting applications for the Adaptation in Action program. The Administration is requesting approval to submit applications to the program and if approved for the Mayor and City Clerk to have the authority to execute the agreements under the Corporate Seal.

RECOMMENDATION

1. That the Administration be directed to submit the applications outlined in this report to the Federation of Canadian Municipalities Adaptation in Action Program;
2. That if the applications are successful, the Mayor and City Clerk be authorized to execute the agreements under the Corporate Seal; and
3. That if required, the Senior Financial Business Partner be granted delegated authority to sign and submit progress reports and financial claims related to the projects.

BACKGROUND

FCM under the Local Leadership for Climate Adaptation initiative has introduced the Adaptation in Action Program. This fund specifically extends grant funding and capacity building to promote equitable climate adaptation and nature-positive community benefits.

The program is split into two funding streams:

1. Feasibility Study – Grant up to 80% of eligible costs up to a maximum of \$70,000. This grant is for studies of a climate adaptation projects that improves municipal readiness for climate events.
2. Implementation Projects – This stream will contribute up to 60% of eligible costs on projects. Under this program, projects are limited to \$1 million in total eligible costs, but the programs contributions may be increased if following strategic priorities such as:
 - a. Projects that meaningfully address anti-racism, equity and/or reconciliation;
 - b. Projects that emphasize nature-positive adaptation; and
 - c. Partnering with indigenous communities or collaboration between two or more municipal governments.

The pre-application deadline for the program is August 14, 2024 and requires a resolution from City Council as part of the application process.

DISCUSSION/ANALYSIS

In order to qualify for funding under the Adaptation in Action Program, projects must support measures that reduce impacts from climate-related events and hazards and must be:

- New or subsequent phase of a climate adaptation project.
- Capable of completion within three years from the date of approval.
- Developed and constructed to ensure that hazard sensitivity is not increased, is not transferred to any parties or to the environment and does not increase sensitivity to other hazards.

Spray Pad Climate Adaptation Proposal

The spray pad water conservation and climate change adaptation (public cooling) project aim to provide the public equitable opportunities for cooling off and access to drinking water, especially during the emergency heat wave periods, while also helping to increase the resiliency of water and wastewater treatment system by conserving water during the summer peak water demand period. A pilot project conducted on seven spray pads in 2023 helped save 24% water on average by replacing the existing spray nozzles with lower-flow nozzles without any negative impact on the user experience.

In 2023, Saskatoon had 18 days under extreme heat wave conditions compared to 12 days in 2022, seven days in 2021, and three days in 2020. And this trend is likely to continue to exacerbate based on several climate change projections, thereby increasing water demand and the potential for adverse human health effects like heat exhaustion, edema, or strokes. Therefore, this project aims to:

- (a) In Phase One (*primarily focusing on water conservation*), (i) replace existing spray nozzles with lower-flow nozzles at 23 spray pad sites and (ii) add/replace controllers at 11 spray pad sites to modify the sequencing patterns and remotely adjust schedules for water conservation.
- (b) In Phase Two (*primarily focusing on adaptation to extreme heat events via public cooling*), (i) add shade structures, misting stations & water fountains at six spray pad/paddling pool sites and (ii) add/replace controllers at the remaining 11 spray pad sites to modify the sequencing patterns and remotely adjust schedules for extreme heat events.

These amenities will help the public cool off and adapt to the adverse effects of climate change during the summer season. The sites where these amenities will be installed will be selected using a need-based, equity-lens matrix, weighing factors like neighborhood's current access and proximity to drinking water/shelter/air conditioning, neighborhood's income below the after-tax Low-Income Measure likely resulting in increased reliance on walking and transit to move around, neighborhood's green infrastructure that impacts the urban heat island effect etc., and these sites may or may not overlap.

Thus, this proposal represents both (a) an additional scope to an existing project on spray pad upgrades as well as (b) incremental work activities to the spray pad upgrades for climate adaptation.

Both phases of this project will run concurrently during the period 2025-2027. However, this proposal seeks to leverage grant funding for only Phase Two (public cooling) of the project due to the eligible cost limit of the FCM program. The estimated cost for this phase is \$1.0 million.

Woodlawn Cemetery: North Burial Design Project

As identified in the Cemetery Master Plan, Green Burials emerged out of Europe in the 1990's as a simpler form of full body interment and is now attracting increasing interest across North America. Also known as "natural burial," "country burial" or "woodland burial," green burial is defined as an earth burial with:

- No embalming;
- A fully biodegradable casket or shroud;
- No use of burial plot liners or concrete vaults;
- Some form of habitat restoration of the grave site such as planting with native species, and
- A communal marker, no marker, or at most a simple marker made of local and natural materials.

The Cemetery Master Plan 2022 recommends the City of Saskatoon (City) implement a sustainable burial practice such as green burial. Green burials are designed to reduce environmental impacts and ensure a legacy of protecting the land where those who passed are laid to rest.

In the proposed north burial design, 5,270 square meters of irrigated lawn will be converted to naturalized wildflower meadows and birch groves. Wildflower meadows that are native to the prairies are beneficial for the environment, as they have adapted to grow in a prairie climate and do not require the same irrigation requirement as turf. As a result, there is the potential for a 40% irrigation reduction for the north burial section of the cemetery.

Wildflower meadows provide food and shelter for wildlife such as bees and bird populations. Established wildflower meadows have a complex root system, which assists in flood prevention by holding onto rainwater in the root zone. Grassland soils can sequester as much carbon as woodland and reduce greenhouse gases, which can further aid the City in meeting its adaptation strategy objectives.

Birch groves will increase the canopy size of Saskatoon's urban forest, which enables better adaptation to the effect of climate change on temperature patterns and weather events. The proposed design includes the planting of 30 Birch trees (*Betula papyrifera*). The benefits of incorporating birch groves into the landscape include:

- Provide natural cooling effect through shade;

- Buffer high winds;
- Maintain rainwater;
- Reduce stormwater flow;
- Control erosion; and
- Reduce the impact of drought.

The proposed north burial design addresses TCR Call to Action #57 by generating awareness around Indigenous Peoples burial traditions and practices. [“When The Time Comes”: A Guide for End-of-Life Planning for Indigenous People](#) by Saskatoon’s Survival Circle highlights Indigenous Peoples burial traditions and the need for more spaces in Saskatoon to hold a wake and ceremonial fire. The proposed design includes a Ceremonial Fire Gathering Space that Indigenous Peoples can utilize. At the heart of the design would include actively engaging with Indigenous Peoples on design elements and requirements to meet burial traditions and cultural practices.

The estimated cost for this project is \$330,000.

FINANCIAL IMPLICATIONS

The Adaptation in Action program will contribute up to 60% of eligible costs up to \$1 million. Additional funding may be contributed from the program if the projects achieve the priorities outlined in the report. If these applications are approved, the Administration would report back regarding funding options for the City’s 40% requirement to these projects which would include a combination of reserve contributions, Green Loans and/or other short-term borrowing.

OTHER IMPLICATIONS

There are no privacy, legal, social or environmental implications identified.

NEXT STEPS

If applications are approved, the Administration will report back to City Council at the appropriate time to report on funding plans for each project.

REPORT APPROVAL

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