Appendix 1

Climate Change Adaptation Program

The Climate Change Adaptation Program (CCAP) is a national, competitive, and merit-based contribution program intended to support the goals of Canada's National Adaptation Strategy and position Canada's regions to adapt to a changing climate. Eligible projects include developing, sharing, and applying knowledge, tools, and practices that will assist communities, decisions-makers, and natural resource-sector businesses in taking adaptation-informed decisions and developing and implementing adaptation actions.

Projects under the economics topic should advance knowledge of the economics of climate change impacts, explore use of innovative economic tools and instruments, and build capacity to use economic information in adaptation decision-making. Eligible projects under this topic include:

- Economic analysis of climate change impacts and adaptation in a local context;
- Costs, benefits, and cost-effectiveness of adaptation actions;
- Economic assessments of the value and benefits of adaptation solutions such as natural infrastructure;
- Documenting the range of co-benefits associated with different types of adaptation actions to inform decision-making; and
- Capital items, such as the construction or modification of infrastructure, are not eligible under the program.

The CCAP program will pay up to 60% of eligible expenditures. Eligible costs include City salaries and benefits; professional, scientific, and contracted services; communications; license fees; and honorariums and ceremonial costs for Indigenous recipients. Projects must request at least $150,000 in eligible costs to be considered eligible.

To leverage the CCAP funding, the City's matching contribution can include financial, in-kind, and/or staff time on the project.

The application deadline is September 22, 2023. All projects must be completed no later than December 31, 2026.

<u>The Economic Value of Natural Assets in a Changing Climate Project</u>
The Administration is requesting approval to submit an application to conduct an economic analysis of the impacts of climate change and adaptation solutions on natural assets, including the corresponding risks and benefits to adjacent residential, commercial, and industrial areas. The <u>Economic Value of Natural Assets in a Changing Climate</u> project will examine priority natural areas and assets in Saskatoon. Natural Capital Asset Valuations will be completed for these sites, with an emphasis on the cost-benefit analysis of managing and restoring the sites to achieve climate adaptation, storm water management, and other ecosystem service benefits.

This work is aligned with the Corporate Climate Adaptation Strategy and supports work to integrate resilience planning into current work and integrate climate risk and resiliency into asset management. Effective management of the City of Saskatoon's (City) natural assets supports the City's core services, such as storm water management, and is becoming more essential to prevent the degradation of these assets due to changing climate conditions. This project will support the City in future decision-making on climate adaptation solutions by providing a more detailed understanding of the services provided by natural asset solutions to address high priority climate risks.

Gaining a better understanding of the condition, quality, and value of our natural assets (and how those factors change depending on level of maintenance, asset management, and restoration), will support the City in determining appropriate levels of service for priority sites in the green network. It will also support the development of key performance indicators and targets for the green network, as well as monitoring and mapping, as part of the Green Network Program.

Natural assets found in Saskatoon such as natural areas and wetlands play an important role in climate adaptation through carbon sequestration and climate resiliency benefits such as storm water management and urban cooling. For example, the City's *Natural Capital Asset Valuation* (NCAV) pilot study, which evaluated the ecosystem service benefits of the Small Swale and Richard St Barbe Baker Afforestation Area (RSBBAA), estimates that wetlands provide $926/ha/year in the moderation of extreme events. However, there are still gaps in our understanding of the risks that changing climate scenarios pose to natural assets, and how these risks in turn may impact the ability of natural assets to provide climate resiliency services.

The Economic Value of Natural Assets in a Changing Climate project will examine priority natural areas and assets in Saskatoon. Natural Capital Asset Valuations will be completed for these sites, with an emphasis on the cost-benefit analysis of managing and restoring the sites to achieve climate adaptation, storm water management, and other ecosystem service benefits. Outcomes of the project are expected to:

- Assist in future decision-making on climate adaptation by providing a full accounting of the expected future costs of climate change on natural assets, and the degree to which natural assets can support adaptation in the face of different climate risks;
- Identify co-benefits of adaptation solutions (e.g., local economic benefits to and costs avoided for residents and businesses, social and cultural benefits of green spaces);
- Support decision-making at the City and in other prairie municipalities by creating a local, detailed accounting methodology for assessing the benefits and climate risks avoided through use of natural assets;
- Provide partners, such as Meewasin, business associations, and prairie regions, with valuable economic data that can support decision-making;
- Support future funding applications, which are increasingly requiring detailed cost estimates, valuation, and cost avoided through natural assets; and

- Support incorporation of climate risks and natural asset valuation in planning and development processes (e.g. Sector and Concept Planning), Natural Area Screenings, and Natural Area Management Plans.

This work builds on:
- The *Corporate Climate Adaptation Strategy*;
- the *Wetland Policy*;
- Natural area management planning and processes development; and
- the City's asset management framework.

This work is aligned with:
- Corporate Climate Adaptation Plan Initiative G.15: Services and Emergencies: Climate Change scenarios and responses;
- Corporate Climate Adaptation Plan Initiative K.24: Design Assets in Alignment with Climate Projections;
- Corporate Climate Adaptation Plan Initiative K.25: Review Standards for Resiliency;
- Corporate Climate Adaptation Plan Initiative L.28: Species Selection for Resiliency, L.29 Retain moisture;
- Green Pathways Initiative 1.2.1: Natural Area Management Plans;
- Green Pathways Initiative 1.4.1: Natural asset framework;
- Green Pathways Initiative 3.1.3: Green network asset integration; and
- Green Infrastructure Strategy Action 4.5: Evaluate the ecosystem services of the green network through the Natural Capital Asset Valuation process.

<u>CCAP Merit Criteria</u>
The CCAP program will score applications on 5 criteria. They are:

1) Project Objective, Intended Audience, Outputs and Outcomes – project addresses the goals and outcomes of at least one topic in the CCAP, intended audiences are appropriate and clearly defined, products and outputs are expected to enable intended audiences to take adaptation action, and outcomes expected to deliver impact.

2) Methodology and Work Plan – the work plan is appropriate and relevant for achieving the objectives of the proposed project and includes:
    - Early and continued involvement of the intended and an approach to knowledge mobilization for reaching the intended audience;
    - Equity, diversity, and inclusion considerations;
    - Identified indicators and measurement of the project's progress;
    - An approach to incorporate Indigenous Knowledge and/or engagement with Indigenous communities, organizations, or groups; and
    - Use of innovative approaches or methodologies and/or generation of new knowledge that helps advance progress on adaptation.

3) Capacity to Deliver the Project – relevant technical and knowledge mobilization expertise, and capacity to manage funds are clearly demonstrated and substantiated.

4) Project Budget – the overall budget delivers good value for achieving the intended project objectives and outcomes.

5) Collaboration and Partnerships – partnerships are leveraged to deliver meaningful results and ensure impacts, appropriate partners are identified and involved in delivering the proposed project and their roles are clearly outlined.