

Topic: Climate Adaptation Plan Overview

Introduction:

This report provides background information on the development of a Climate Adaptation Plan for Parkland County.

Facts (Background Information):

Climate adaptation planning is a proactive way to assess climate risks and impacts and develop resilience strategies to protect municipal assets, services, operations, and the well-being of community members.

The Agriculture and Environment team presented to Council in June 2024 (RFD 24-177) regarding a grant opportunity through the Federation of Canadian Municipalities to develop a Climate Adaptation Plan. Council approved the application and co-funding, and the County was successful in securing the FCM grant funding.

The Request for Proposals to develop the Parkland County Climate Adaptation Plan was made public in late 2025, and consultants, ISL (in partnership with STOK), have been awarded the contract. This report and today's presentation provide an overview of what will be involved in the process of developing a Climate Adaptation Plan for the County.

Parkland County has and is experiencing climate related impacts including:

- Large scale wildfires
- Drought conditions resulting in agricultural losses
- Localized flooding of roadways, private properties, and agricultural land
- Damage to Environmentally Sensitive Areas and natural systems
- Extreme weather events
- Water treatment disruptions caused by large stormwater runoff volumes

Climate-related impacts affect the services the County delivers as well as the health, safety and well-being of our community.

In 2023, the Edmonton Metropolitan Region Board (EMRB) and its 13 municipalities undertook a regional Climate Resilience Study: *From Risk to Resilience*.

The EMRB study estimated that the cost of inaction to these climate hazards was \$4 billion per year (2021 dollars) by mid-century (2050s).

The largest sources of future losses across the region due to climate impacts were identified to be:

- Adverse public health impacts, including illness, mental health disorders, hospitalization, and deaths resulting from climate-driven deteriorations in air quality, extreme heat, and other extreme weather.
- Impacts on buildings structures and function due to exposure to climate enhanced storms, floods, and rising space cooling costs.
- Damage to natural living systems and ecosystem services

Utilizing the funding from the Federation of Canadian Municipalities, our contracted consultants will now be able to assess these risks more locally specific to Parkland County and develop an action plan to address these. The plan will;

- Reduce the impact of climate related risks to municipal assets, services, and operations as well as to community health and wellbeing, economy, and the environment;
- help to ensure the community remains safe, affordable and attractive to investors; and
- assess local community priorities and partnership opportunities to implement coordinated actions over the next ten years.

Parkland County is already undertaking climate adaptation actions that can be incorporated and built on through the Climate Adaptation plan process:

- A FireSmart Program that includes home and community assessments;
- A Natural Assets Inventory to identify areas that have flood/drought protection services;
- An annual community rain barrel sale to promote water conservation;
- Co-hosting a Green Acreages Workshop for stewardship incentives funded by the Watershed Resiliency and Restoration Program, reducing the duration and effects of flooding and drought.
- A landscape watering effort to use rain barrels on County lands;
- Water Shortage Action Plan to enact in times of water shortage;
- Alternative Land Use Services (ALUS) Program that lessens the impacts of catastrophic events, both on the farm and within the greater community;
- Wetland Replacement Program;

Analysis:

\$70,000 dollars in grant funding was received in 2025 to support the completion of a Climate Adaptation Plan. An internal Steering Committee will be convened to oversee and provide advice as the Climate Adaptation Plan is developed.

The plan will identify actions and priorities based on risk, feasibility, and alignment with County and community priorities, culminating in a final Climate Adaptation Plan.

Timelines for the development of the plan are broken into four phases (including key engagement activities with Council, the Steering Committee, Indigenous Communities, and the public):

Milestone	April-May 2026	June 2026 – March 2027	March-June 2027	July-September 2027
Phase A. Initial Project Planning/Background Research <ul style="list-style-type: none"> • Baseline climate information • Inventory of existing climate actions (internal and community) • Engagement Plan 				
Phase B. Local Vulnerability and Risk Assessment <ul style="list-style-type: none"> • Participatory Risk Assessment • Climate Risk Mapping 				
Phase C. Adaptation Plan <ul style="list-style-type: none"> • Participatory Adaptation Planning • Action Roadmap: Short, medium, long-term actions 				
Phase D. Reporting and Finalization <ul style="list-style-type: none"> • Final Adaptation Plan • Information Dissemination 				
Engagement	<ul style="list-style-type: none"> • Council Briefing • Introductory Steering Committee Meeting 	<ul style="list-style-type: none"> • Public survey • 2 x in-person public sessions • Staff workshop • Indigenous communities meeting • Focus group meeting • Steering committee • What We Heard report • Council Briefing 	<ul style="list-style-type: none"> • Public Survey • External Stakeholder workshop • Staff Workshop • Indigenous Communities Meeting • Steering Committee • What We Heard report • Council Briefing 	<ul style="list-style-type: none"> • Steering Committee • Council Briefing

Conclusion/Summary:

The Agriculture and Environment team presented a grant opportunity to Council in June 2024 (RFD 24-177) through the Federation of Canadian Municipalities to develop a Climate Adaptation Plan. Council approved the application and co-funding, and the County's application was successful. Our project team is here to provide Council with an overview of the project process and outcomes.

The Climate Adaptation Plan will be guided by data and informed by internal and public engagement, and will be brought to Council for final approval by November 2027.

Administration recommends that Council receive the Climate Adaptation Plan Overview for information, as presented.

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