

Resilient communities

Key Points

Communities in Alberta - Climate impacts on rural communities - Community resilience - Land use management

What's going on?

Cities and towns in southern Alberta are taking climate change into account in their plans for the future, focusing on community design that balances the needs of people and the environment.

What are we doing right now?

Southern Alberta is home to many innovative projects and policies that are helping to create more resilient communities. These include:

- [Kainai Iinnii Rematriation Project](#) – Blood Tribe Land Management – Project to return buffalo to southern Alberta.
- [Eastern Slopes Community-Based Aquatic Monitoring Collaborative](#) – Living Lakes Canada and numerous ENGOs – A citizen-science project using CABIN (Canadian Aquatic Biomonitoring Network) and STREAM (Sequencing The Rivers for Environmental Assessment and Monitoring)
- protocols to build a reference case in the Rockies to protect the headwaters of major rivers linking to the Canadian prairies.
- [Miyawaki Forest Project](#) – Calgary Climate Hub – Planting tiny forests using native species in Calgary to improve community resilience.
- [Exploring Emerging Economic Opportunities in Southwestern Alberta](#) – Yellowstone to Yukon Conservation Initiative – Multi-stakeholder project that shares ways in which communities in southwest Alberta can diversify local economies while supporting nature.
- [Putting Beavers Back to Work](#) – Miistakis Institute/Cows & Fish – Working with landowners to see beavers as a resource for flood-mitigation and improving water quality and quantity.

What can I do?

There are simple actions that you can take to help make your community more resilient.

- Be an engaged citizen and actively participate in the decision-making processes that shape our cities and communities. One way to get involved is to show your support by getting involved with campaigns that are looking to protect the people and places that are important to our communities, such as [Defend Alberta Parks](#);
- Participate in a citizen-science program and contribute to projects that can be used to inform local policies on energy and climate choices; and
- Host community conversations, like [climate cafés](#), to talk about the issues you care about. Share your insights with your elected leaders to let them know what you support and how you would like to see change.

Overview

Climate change has a significant impact on our communities and natural spaces, but we have the ability to make changes to better protect these places for the future. In southern Alberta, a significant amount of land is already stewarded by First Nations and ranchers, providing crucial safeguards for water and supporting biodiversity. Albertans feel a strong connection to the land they call home and are increasingly interested in having a say in how their communities are developed, how the environment is protected and what services are best for their community. As we move into the future, it is essential to make building resilience a key part of land-use policy and practices and a wise investment for communities, as it is a reflection of our shared values and love for our home.

Communities in Alberta

There are [17 municipalities across southern Alberta](#) that are taking climate initiatives into their own hands. Building solutions at a local level allows community members to have more control over the safety and prosperity of their communities, while also having a direct impact on things they care about like improved [air quality](#) and [conserving natural](#) spaces.

“When you can go from a natural system to joining somebody on a patio, and when you know the people that run those small businesses in town, and when you can run into your council person or your mayor at the grocery store, that really fosters that sense of community and having power over your environment and being able to influence what’s happening there.”

- Sheri Young, Climate Change and Energy Specialist in Okotoks

When planning for our cities, towns and neighbourhoods, we have to think about a lot of different things like how we get energy, how we move around and how we build our homes. Cities and towns are working on ways to make sure they are ready for changes in the climate, like improving their infrastructure and planning for extreme weather. They are also reducing the amount of pollution they release into the air. By designing communities where people can walk and be active, building homes and buildings that are more comfortable and use less energy, and working to keep our natural spaces healthy, communities can be safe from the impacts of climate change and also have a better quality of life.

Climate impacts on rural communities

Rural communities experience climate change disproportionately to urban areas because they are more reliant on the land, and their economies — commonly agriculture and resource sectors — can be sensitive to changes in climate. Not only are rural communities more susceptible to environmental changes like flooding and droughts, but citizens in rural and remote communities also are at a higher risk as they are typically further from emergency services when help is needed during natural disasters. In the case of extreme climate emergencies such as wildfires and floods, communities are often disconnected from necessary resources when infrastructure fails.

Where are we at when it comes to local climate action?

Municipalities can play a key role in helping Canada meet commitments for both significant and long-term greenhouse gas (GHG) emission reductions. Local elected officials play a pivotal role in climate action. Engaged mayors and councillors are key to ensuring a supportive policy environment and involving community members in decisions that build on the vision of the future of the community and help prioritize solutions for building a more resilient community in the face of climate change. ([FCM, 2009](#)) ([FCM, 2020](#))

- 61% of Canadians believe that municipal governments best understand the challenges residents in [their] communities are facing ([Abacus, 2019](#))
- 62% of Albertans think climate change is an emerging challenge that we need to address ([Abacus, 2021](#))
- 46% of Albertans say recent extreme weather events, like heat waves and wildfires, changed their opinion on the urgency to fight climate change ([Ipsos, 2021](#))
- Municipalities across Alberta are addressing the impacts of climate change by creating climate mitigation and adaptation plans. There are more than [15 cities, towns and counties](#) that have implemented climate strategies in the province.

Connecting with your local government and sharing what's important to you is one of the most important and impactful actions you can take. Being an engaged citizen allows you to shape the policies that directly impact the people and places you care about. To start, you can find your [elected official](#) and [write them a letter](#).

In your letter, share your story and voice your concerns by telling them about the changes you would like to see to create a more-resilient community. Share [capacity-building programs](#) with your elected officials to help them learn about the topics you care about and find tools, funding and resources to implement change. Another helpful tool you can share with them is this [councillors handbook](#).

Community resilience

Being aware of, and wanting to protect, our local environment also means being a leader in climate action. Community resilience is the responsibility of the municipality *and* the community members. There are numerous ways community members can help create that resilience, even if their municipality has yet to implement action. Voting and engaging with local government officials is yet another way for community members to express their opinions and address their concerns about the effects of climate change in their community. True community resilience does not exist unless all members of a community are heard. Building a healthy, connected community means diversifying transportation modalities (public and active transportation) while also removing cars from the road, reducing emissions and congestion, enhancing access to emergency corridors and shelters, limiting heat effects, improving air quality, increasing

equitable access to amenities, and contributing to improved green corridors and habitats that can also help reduce flooding.¹

Climate plans and local carbon-reduction goals are set by municipalities — they're necessary to drive collective action that benefits the community as a whole. These larger-scale action plans can lead to improved infrastructure, climate emergency measures, incentives for water-conservation practices and rebates for upgrades that reduce energy consumption while also increasing the resilience of a building. While our environment is vulnerable to changes in climate, good planning and design can help provide protection from extreme climate events. A climate plan might require less residential paving, for example, to divert stormwater overflow and flooding — or might put into place an urban forest strategy so that more trees are planted to help absorb carbon from the atmosphere and reduce additional climate change.

What does your [resilient community](#) look like?

[Prairie Communities – Adapting to Climate Change](#)

“Municipalities own over half of the aging public infrastructure in Canada and face some of the biggest challenges they’ve ever seen as a result of climate change. Creating plans to adapt to climate impacts is complex and uncharted territory for many municipal staff, councillors, residents and community leaders. In this video, urban, rural, and Indigenous communities in the prairies share their unique approaches, successes and lessons learned in prioritizing risks and preparing for the changes to come.”

Source: Prairie Climate Centre



The Town of Raymond was Alberta's [first electrically net-zero municipality](#) — and one of the first in Canada. The Town installed solar panels on all of its municipal buildings to generate enough electricity to cover 100% of the Town's operational electricity use — from running buildings to lighting streets.

[Land use and management](#)

In urban communities, pathways and greenspaces provide citizens with ways to navigate besides traditional road networks. These spaces increase the use of active transportation by allowing other modes of transportation, such as biking and walking, to become more viable. Reducing vehicle traffic also creates safer roads and reduces pollution. There are many economic benefits for communities with robust trail networks and greenspaces. For starters, building and maintaining these spaces requires labour, which increases local income and employment. Tourism has been proven to increase in these areas as local attractions bring visitors to the community — and the local economy benefits from visitor spending. While these spaces support local businesses, they have also been shown to increase property values for

¹ https://act-adapt.org/wp-content/uploads/2021/05/ICABCCI_Advancing-theCo-BenefitsofClimateAction_WEB.pdf

nearby homes. Trails and greenspaces improve health and well-being. Active modes of transportation increase physical activity and immersion in nature, which improves physical and mental health. Reducing the number of fossil fuel-burning vehicles by implementing cleaner ways to commute also improves the overall quality of the air we breathe.²

More than 80% of Albertans live in urban areas. Municipal governments such as those in Lethbridge and Calgary have recognized the importance of [building climate resiliency](#) into their city planning, while others are still incorporating it into their vision for the future. Read more on how municipalities can use land-use planning to adapt to climate change [here](#).

Recap

Alberta's communities, while vulnerable to the effects of climate change, have the power to address their own concerns by implementing changes within their environments. Residents have a strong sense of community and a strong connection to the landscapes around them, making actions tangible and immediately beneficial. Climate action across communities in southern Alberta are on the rise as renewable energies and environmental conservation gain traction around the world. Through these opportunities, Albertans will benefit from a better quality of life, cost savings and improved public spaces.

Resources from local organizations that support learning and action for communities			
Resource	Organization	Audience	Description
Join a local climate hub	Calgary Climate hub	General public	The Calgary Climate Hub is a volunteer-led, non-profit organization that unites a diverse group of Calgarians committed to working together to support meaningful local action on climate change.
Advancing Citizen Science in Alberta	Government of Alberta	General public	From reporting grizzly bear sightings to listening to amphibian calls and assessing water quality, many Albertans are engaged in scientific research and monitoring across the province. Through citizen-science, Albertans have the opportunity to help answer questions on Alberta's environment, contribute to data and information gaps, and inform decision-making.
Green Communities Guide	Land Stewardship Centre	Local government	An essential tool to help communities plan and implement nature-based solutions and strategies to conserve water, protect water quality, preserve agricultural land, and protect critical open spaces and wildlife habitat.
Climate Resilience Express	All One Sky Foundation	Local government	A workshop-based process to quickly build community support for climate-adaptation plans.

[Find more resources here](#)

² <https://tctrail.ca/news/conference-board-of-canada-new-report-outlines-economic-health-conservation-benefits-of-trails/>