Make it local:
A guide to local climate data in Alberta

The Alberta regional key message maps give you the framing and the language. What makes messages land is local specificity—your community's numbers, your community's events, your community's story. Here is where to find the data you need.

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Local climate projections and hazard data

- **ClimateData.ca**: temperature and precipitation projections, drought and flood risk, wildfire risk, customized to your municipality or region. This is the starting point for grounding any climate message in local reality.
- **Climate Insight**: a free, national platform with interactive maps of climate hazards and social vulnerability, quick climate risk assessments, and community profiles for municipalities across Canada. Useful for showing residents where climate impacts are likely to hit hardest in your community, and which solutions can make the biggest difference.
- **Alberta Wildfire Service**: historical fire data, community risk ratings, FireSmart assessments and program funding.
- **Alberta River Basins (rivers.alberta.ca)**: real-time and historical streamflow data, water shortage advisories, watershed conditions by river basin.
- **Alberta Environment and Protected Areas**: drought advisories, water shortage stages, flood hazard mapping for your community.

Infrastructure and costs

- Your municipal finance department: actual infrastructure repair and replacement costs linked to extreme weather events.
- **Insurance Bureau of Canada (IBC)**: regional data on insured losses from extreme weather, rising insurance costs. Alberta has among the highest severe weather insurance losses in Canada.
- **Municipal Climate Change Action Centre (mccac.ca)**: Alberta-specific climate adaptation resources, funding programs, and case studies from communities like yours.

Energy and buildings

- **Alberta Municipalities/Clean Energy Improvement Program (CEIP)**: whether your community has launched a CEIP program, uptake data, and energy savings achieved.
- **Natural Resources Canada**: retrofit cost savings data, heat pump performance data by climate zone, solar resource maps.
- **Municipal Climate Change Action Centre**: energy benchmarking data for Alberta municipalities, Energy Manager program.

Agriculture and water

- **Agriculture Financial Services Corporation (AFSC)**: crop insurance claims data, drought and hail loss data by region.
- **Alberta Agriculture and Irrigation**: drought impacts, water use data, agricultural moisture situation updates.
- **Battle River Watershed Alliance/your regional watershed council**: local watershed health data, water shortage advisories, drought monitoring.
- **ALUS (alus.ca)**: if your community has an ALUS program, data on land restoration projects, ecosystem services, and producer participation.

Health impacts

- **Alberta Health Services:** heat-related illness data, air quality health advisories, wildfire smoke exposure data for your region.
- **Alberta OHS (Occupational Health and Safety):** wildfire smoke and extreme heat guidance for outdoor workers, relevant for agricultural communities.

Your community's own plans

Your municipal development plan, climate change mitigation plan, flood mitigation studies, climate adaptation plan, and infrastructure asset management reports are among the most powerful local sources. If your community has worked with MCCAC on a climate risk assessment or adaptation plan, that document is your best starting point. Residents respond to numbers and events from their own community—not provincial averages.

A note on small and rural communities: not all data sources listed above will have community-level resolution for every community. Where municipal-level data isn't available, regional data from your county, municipal district, or regional health zone is a reasonable substitute. The goal is specificity—the closer to home, the better.

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