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Why Community Wildfire Preparedness Matters

Wildfire Resilience Consortium of Canada

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Regional Wildfire Knowledge Network Coordinator

Alberta Municipalities Public Risk Conference | June 2, 2026





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Wildfire Resilience Consortium of Canada
Consortium pour la Résilience aux Feux de Forêt du Canada

Our vision

Providing all Canadians access to wildfire knowledge for a more resilient future.

Our mission

Engage with everyone in the wildland fire ecosystem and beyond; **Connect** knowledge holders, generators, and users; and **Accelerate** innovation in wildland fire management using a whole-of-society approach.

Community Impacts

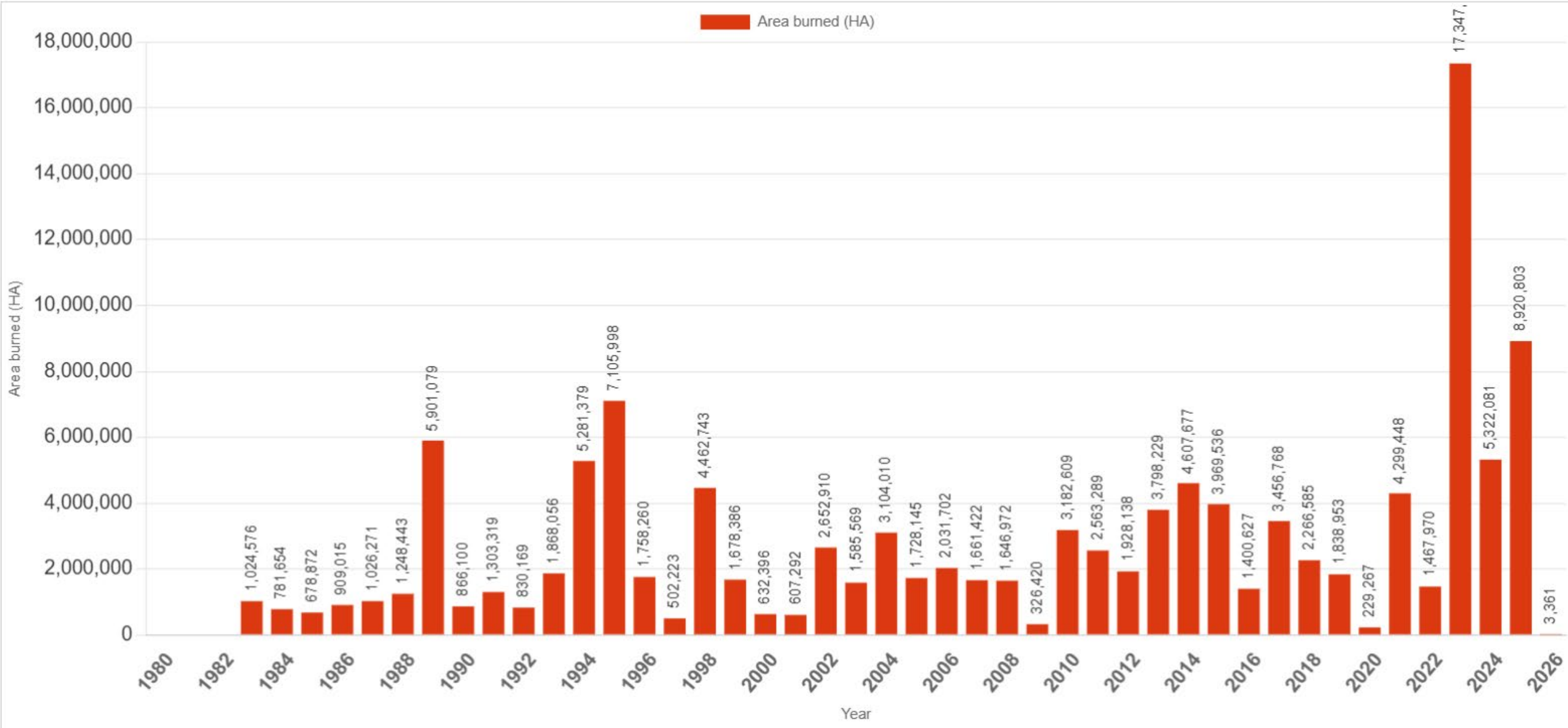


“Do Nothing” looks like this

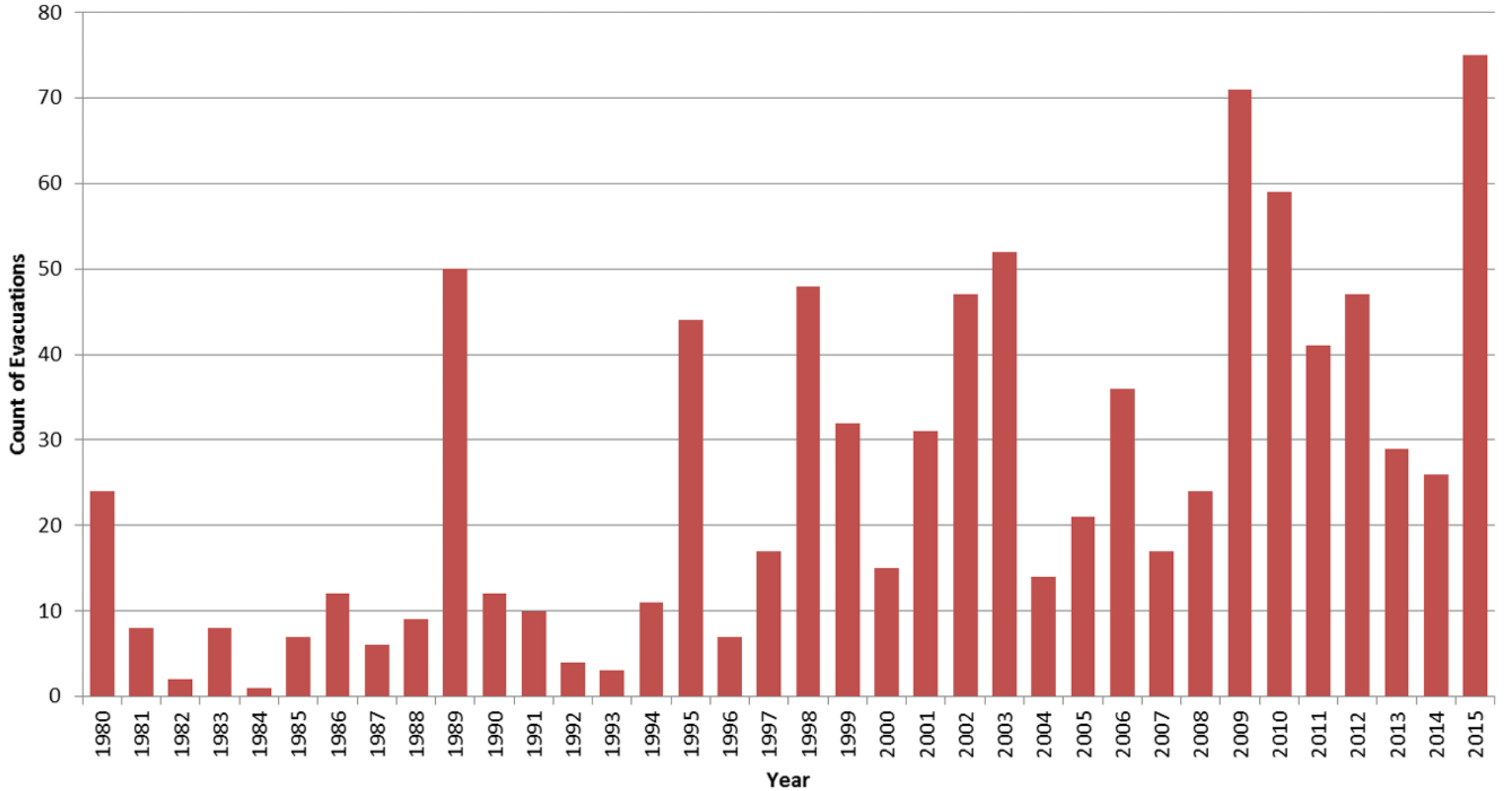


Photo Credit: The Globe and Mail

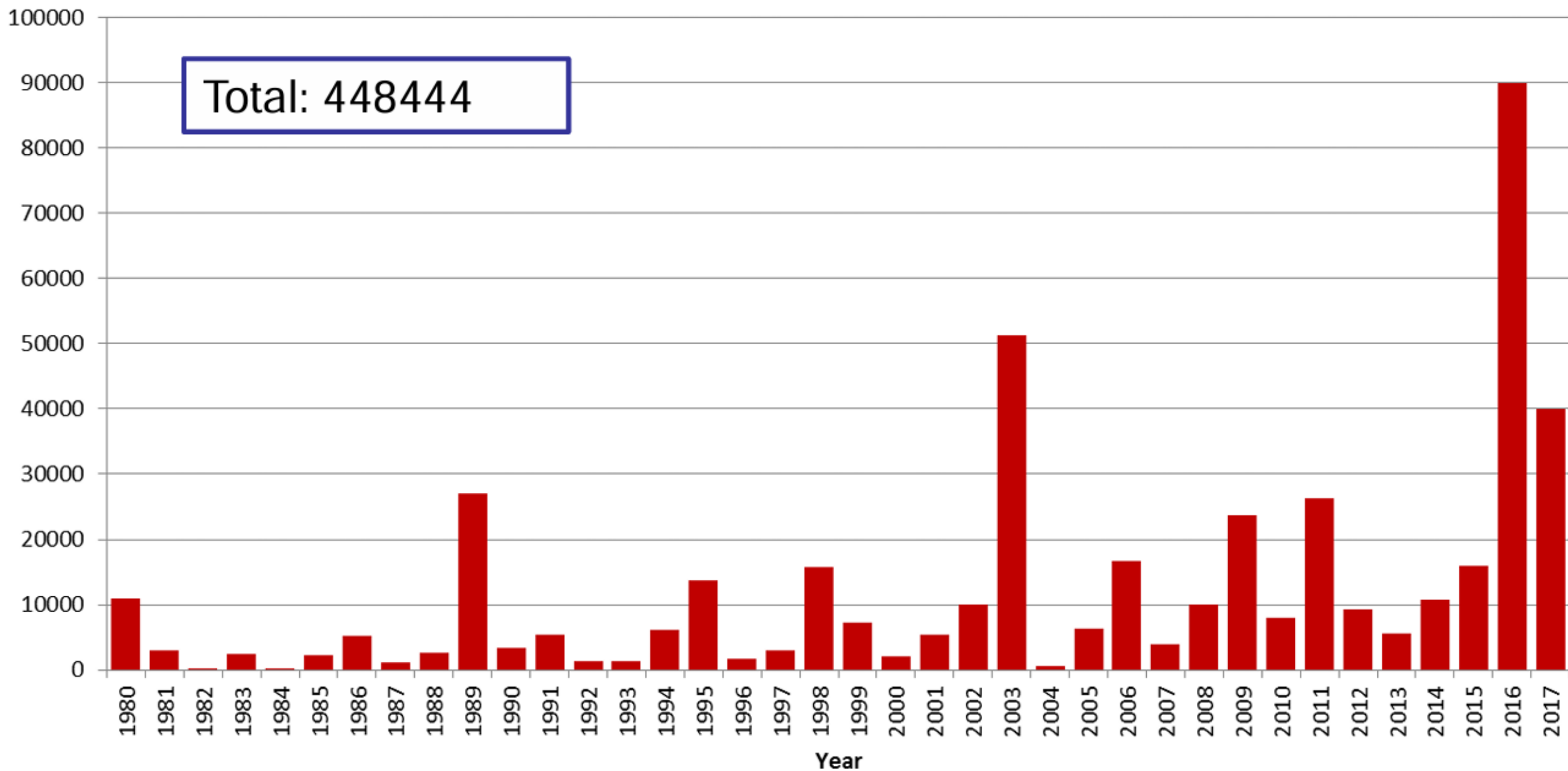
Annual Area Burned in Canada



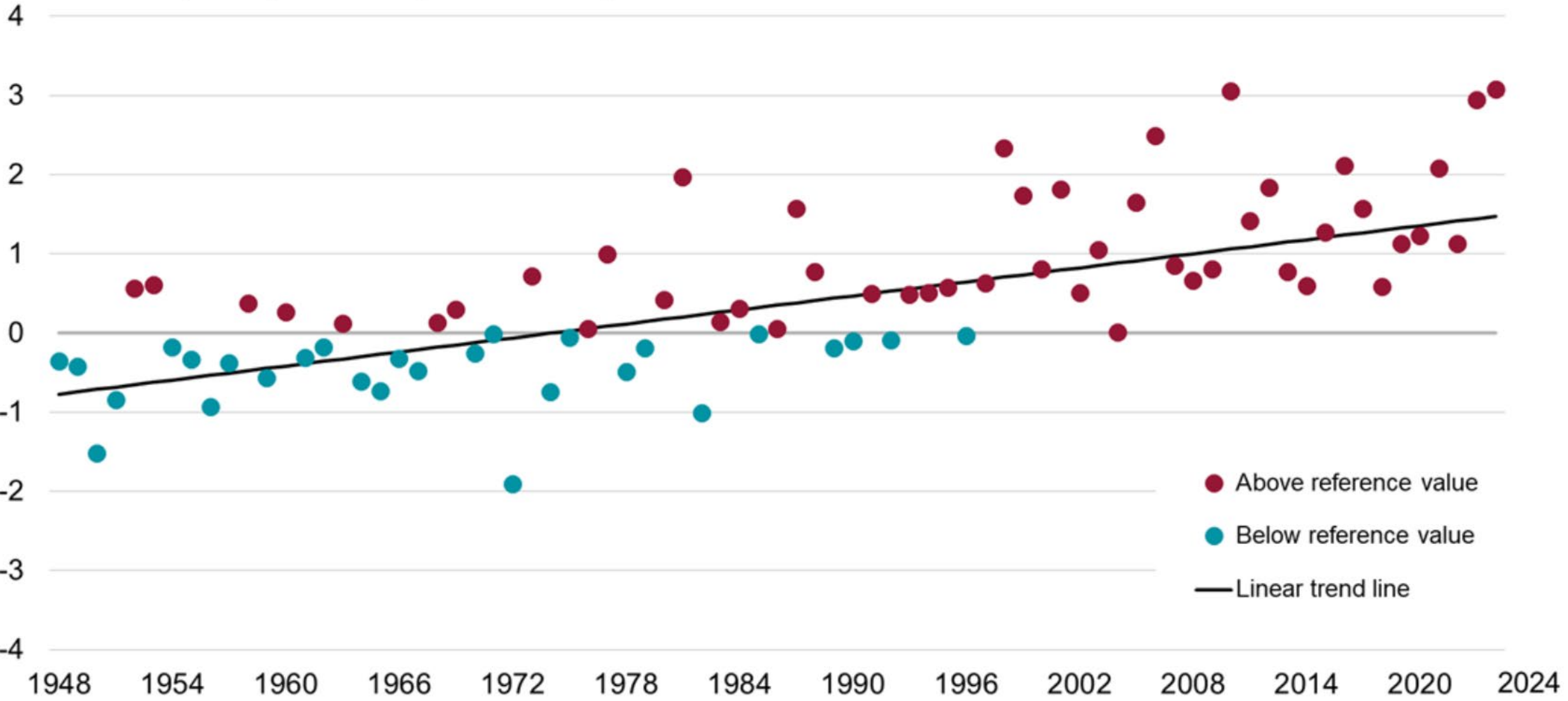
Number of Wildfire Evacuation Events in Canada (1980-2015)



Number of Wildfire Evacuees in Canada 1980-2017



Annual average temperature departures in degrees Celsius



Investment Case

World Economic Forum

- \$1 invested in wildfire-resistant construction could save \$210 in avoided future economic losses.



Institute for Catastrophic Loss Reduction

- Every \$1 spent could save up to \$30 in recovery costs.

**Good News:
Solutions Exist!**





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[Together Transforming Wildfire Management in Canada | WRCC - CRFFC](#)

Alberta Municipalities' 2026 Public Risk Conference • Edmonton, AB

Wildfire resilience in Alberta, The Reframe

Strengthening Community Wildfire Resilience

Michael Coutu

FireSmart Specialist

Government of Alberta • Forestry and Parks



THE CORE TRUTH

“The reality is we will never prevent all wildfires, but we can take steps towards reducing the negative impacts”

— Minister Todd Loewen, Alberta Wildfire Mitigation Strategy (March 2026)

01

PART ONE

What brought us here?

A decade of wildfires that rewrote the rules.



THE PATTERN

These are not isolated events.

Six wildfires shaped how Canada — and Alberta — think about community protection.

2003

KELOWNA, BC

240 homes lost • \$150M

2011

SLAVE LAKE, AB

354 homes lost • \$800M

2016

FORT McMURRAY

2,400 structures • \$3.6B

2021

LYTTON, BC

151 structures • \$78M

2024

JASPER, AB

358 structures • \$880M

2025

CHIPEWYAN LAKE

27 structures • Critical infrastructure lost

02

PART TWO

The reframe.

Alberta is asking us to reconsider our relationship with fire.



Fire is not a monster. It's a feature.

Alberta's boreal forest evolved with fire. Our dominant tree species are not merely tolerant of fire — they depend on it.



SEROTINOUS CONES

Lodgepole pine and jackpine cones are sealed with resin. They open — and release seeds — only with the intense heat of fire.



NUTRIENT CYCLE

Fire returns nutrients locked in dead vegetation to the soil, stimulates new growth, and supports wildlife like deer, moose, and fire-specialist insects.



LANDSCAPE MOSAIC

Historic fire regimes created patchworks of burned and unburned — the biodiversity backbone of healthy boreal ecosystems.

“Wildfire is critical to healthy ecosystem function.” — Alberta Wildfire Mitigation Strategy, 2026

WHAT WE GOT WRONG

A century of suppression created the conditions we're now fighting.

For more than 100 years, North American wildfire policy prioritized rapid extinguishment of every fire. It worked — in the short term.

01 Fuels accumulated.

Dead wood, duff layers, and ladder fuels built up on the forest floor.

02 Forests densified.

Stand density increased; canopies closed; species diversity narrowed.

03 Landscapes homogenized.

The fire-mosaic was replaced by continuous, highly flammable structures.

The suppression paradigm thus contributed to the very conditions it sought to prevent.

THE CORE TRUTH

“Wildfire has naturally occurred across Alberta’s landscape for thousands of years”

— Minister Todd Loewen, *Alberta Wildfire Mitigation Strategy* (March 2026)

For millennia, fire was tended — not fought.

Long before provincial wildfire management, Indigenous Nations across what is now Alberta — Cree, Blackfoot, Dene, Nakoda, and Métis — used fire as a deliberate landscape-management tool.

Cultural burning supported:

- Wildlife forage and habitat
- Fuel load reduction
- Biodiversity and plant regeneration
- Landscape mosaics and visibility

WHAT HAPPENED NEXT

In the late 19th and early 20th centuries, colonial fire policy criminalized Indigenous burning. Communities were displaced from traditional territories. Intergenerational transmission of fire knowledge was interrupted — actively suppressed, in many cases.

Lewis, 1982 • Lake & Christianson, 2019 • Huffman, 2013

THE SHIFT

The question changes.

BEFORE

How do we eliminate wildfire risk?

NOW

How do we learn to live with wildfire?

From mastery over fire → to accountability within fire-adapted ecosystems.

03

PART THREE

Alberta's answer.

The Wildfire Mitigation Strategy — March 2026.



Alberta Wildfire Mitigation Strategy

"A wildfire-resilient Alberta, empowering the whole-of-society to achieve long-term wildfire mitigation, through collaboration and innovation."

— Published March 2026 by Forestry and Parks, Government of Alberta

WHOLE-OF-SOCIETY

Not just Alberta Wildfire. Everyone.

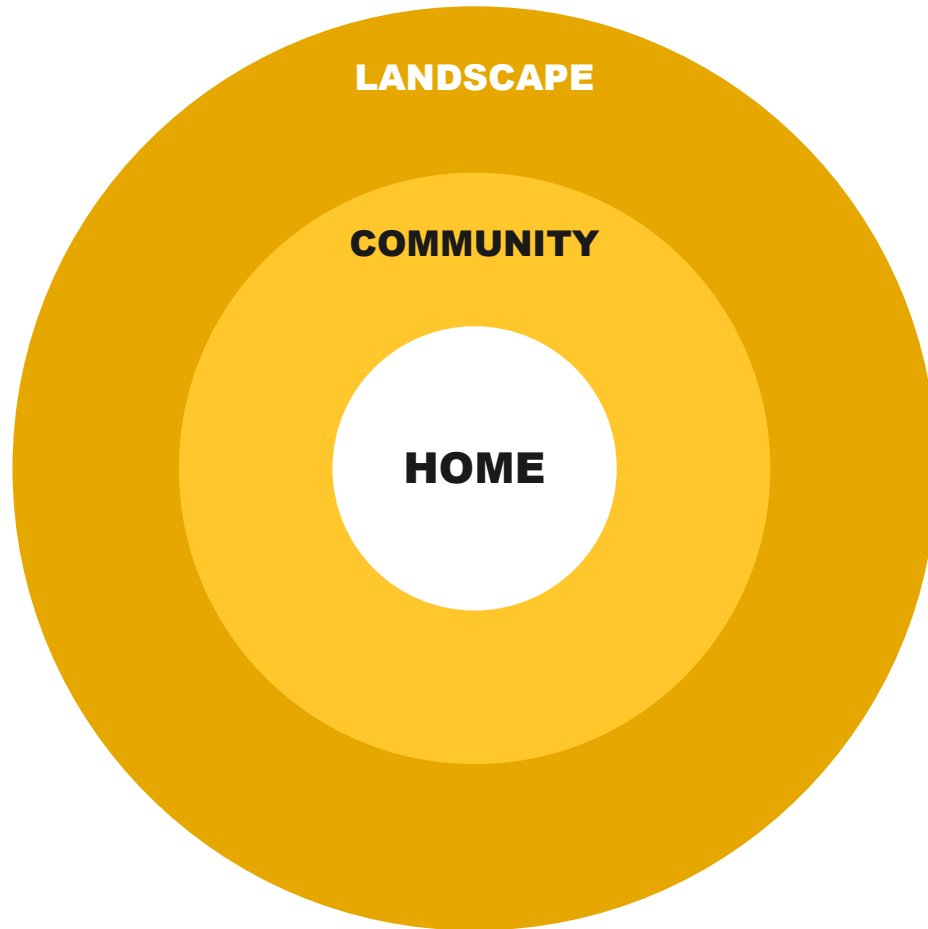
COLLABORATION

Jurisdictional seams, solved on purpose.

INNOVATION

New tools, applied at speed.

Three scales. One coordinated response.



HOMEOWNER

The Home Ignition Zone. 0–30 m around every structure. Embers, vegetation, materials, clearance.

COMMUNITY

The municipality and town/city scale. Manage hazardous fuels, plan-develop-build FireSmart, and educate.

LANDSCAPE

The various stakeholders around your communities. Hazardous fuels management and reducing risk potential.

Six themes

01



Knowledge & Understanding

02



Community & Indigenous Partnerships

03



Legislation, Policy & Governance

04



Technology & Innovation

05



Landscape Planning

06



Hazardous Fuels Management

THANK YOU

Let's continue this conversation.

STAY IN TOUCH

Michael Coutu

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Building Urban Wildfire Resilience

Edmonton's WUI Wildfire Risk Strategy

Speaker: Ashley Hynes, City of Edmonton

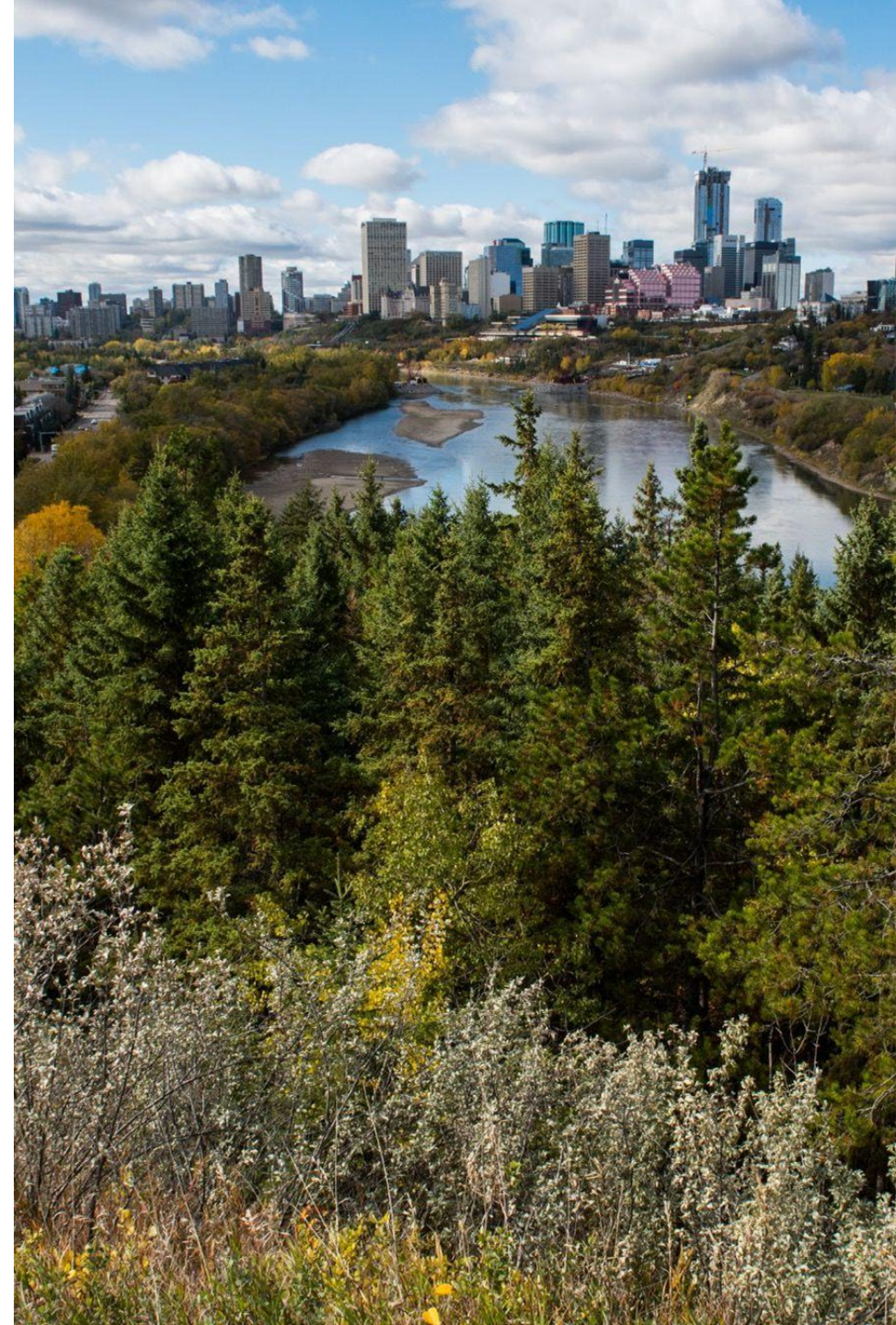
Edmonton

Land Acknowledgement

The City of Edmonton acknowledges the traditional land on which we reside, is in Treaty Six Territory. We would like to thank the diverse Indigenous Peoples whose ancestors' footsteps have marked this territory for centuries, such as nêhiyaw (Nay-hee-yow) / Cree, Dene (Deh-neyh), Anishinaabe (Ah-nish-in-ah-bay) / Saulteaux (So-toe), Nakota Isga (Na-koh-tah ee-ska) / Nakota Sioux (Na-koh-tah sue), and Niitsitapi (Nit-si-tahp-ee) / Blackfoot peoples. We also acknowledge this as the Métis' (May-tee) homeland and the home of one of the largest communities of Inuit south of the 60th parallel. It is a welcoming place for all peoples who come from around the world to share Edmonton as a home. Together we call upon all of our collective, honoured traditions and spirits to work in building a great city for today and future generations.

Project Background

- The **Wildland-Urban Interface (WUI)**, defined as the zone where human development meets undeveloped wildland vegetation, is expanding as Canadian municipalities continue to grow
- Increasing wildfire frequency and severity due to longer fire seasons and drier conditions as a result of climate change



Lessons Learned

- **2016 Fort McMurray wildfire:** \$9 billion in insured losses
- **2024 Jasper wildfire:** \$1.23 billion in insured losses
- **Key contributing factors to structure loss:** Distance to nearby structures, lack of home hardening, inadequate defensible spaces.



Strategy Development Process

TECHNICALLY SOUND

- Jurisdictional scan
- Wildfire exposure modelling (*U of A*)
- Risk assessment
- Expert advice (*Wildland Firefighters, Ecologists, Planners, etc.*)

COMMUNITY SUPPORTED

- 4,500+ public participants (*pop-up events, workshops, virtual sessions, surveys*)
- Indigenous organizations and Knowledge Keepers
- Businesses and development community
- Utility companies
- Environment and conservation groups
- Community groups

4 Strategic Pillars for Wildfire Resilience



REDUCE

Vegetation
Management
Legislation
Development



EDUCATE

Education



RESPOND

Emergency
Planning
Cross Training



COORDINATE

Interagency
Cooperation

Addressing Competing Priorities

Competing Priority	Wildfire Intersection	Integrated Solution
Urban Density	Structure-to-structure spread	Zoning bylaw regulations and defensive space incentives
Urban Forest Canopy	Contiguous fuels	Low-flammability species selection
Social Equity	Vulnerable populations	Targeted education, outreach, emergency response planning
Limited Resources	Cost of hazard mitigation outside of the FPA	Data-driven prioritization of high-exposure sites

WUI Wildfire Risk Strategy - Action Plan



REDUCE

- Wildland Fuel Treatment Program
- Property Owner Incentives
- Bylaw, Policy, and Standard Updates



EDUCATE

- Targeted Outreach
- Promoting Community Action
- Public Surveys



RESPOND

- Structure Protection Plans
- Tactical Wildfire Response Planning & Training
- Wildfire Data Monitoring Program



COORDINATE

- FireSmart Action Group
- Indigenous Cultural Burn Program
- Mutual Aid Agreement Updates

Wildfire resilience is not a fixed goal, but a continuous process requiring ongoing monitoring, adaptation, and sustained collaboration by all.

Thank you

edmonton.ca/WildfireStrategy
wildfirestrategy@edmonton.ca

| **SHARE** YOUR VOICE
| **SHAPE** OUR CITY

Edmonton