CITY OF Thunder Bay
Superior by Nature

2026

EMERGENCY MANAGEMENT STRATEGY

REVISED:

05/01/2026

RECORD OF AMENDMENTS

AMENDMENT NUMBER	SECTION(S) OR PAGE(S) AMENDED	DATE OF AMENDMENT
	Replace entire plan	2026-01

INTRODUCTION

Effective emergency management is essential to protecting the safety, resilience, and well-being of Thunder Bay's residents. As our city faces a growing array of threats, including extreme weather events, wildfires, flooding, cyber attacks, and public health emergencies, it is critical to adopt a coordinated, cooperative, and proactive approach to mitigation, preparedness, response, and recovery. This Emergency Management Strategy provides a framework and direction guiding the ongoing work of the City of Thunder Bay Emergency Management Program,

In recent years, the impacts of climate change have become increasingly evident in Northwestern Ontario. Thunder Bay is experiencing more frequent and intense storms, rising temperatures, and shifting precipitation patterns, all of which heighten the risk of flooding, infrastructure failure, and wildfire-related emergencies. This Strategy embeds climate resilience principles, ensuring that emergency management efforts are grounded in science, support adaptation, and enhance the community's long-term capacity to withstand and recover from climate-driven events as well as other community emergencies.

Equally important is the recognition that emergencies do not affect all residents equally. In Thunder Bay, social and economic disparities can amplify the impacts of disasters on vulnerable populations, including low-income households, seniors, people living with disabilities, Indigenous community members, newcomers to Canada, and those experiencing homelessness. A commitment to social equity is embedded throughout this plan, guiding how risks are assessed, how resources are deployed, and how communities are engaged and supported before, during, and after emergencies.
By investing in climate-informed, equity-focused emergency management today, Thunder Bay is taking decisive steps toward a secure, adaptive, and just future for all its residents.

COMMUNITY PROFILE

Thunder Bay is a single-tier municipality situated on the northwestern shore of Lake Superior and is the largest urban centre in Northwestern Ontario. The community has a census population of approximately 108,000 people with more than 130,000 in the metropolitan area. However, research suggests there may be over 20,000 additional residents not represented in these figures, particularly Indigenous populations[1]. The City serves as a regional hub for healthcare, education, transportation, and commerce. The City boasts an abundance of natural environments in both the rural and urban areas of the city.

The region is subject to various hazards, with recent past events including severe flooding, severe weather events, and the COVID-19 pandemic. There is an extensive wildland urban interface region; putting significant areas of the community and key infrastructure at risk of forest fire impacts. Climate change is anticipated to increase the frequence of severe weather events, the number of fire spread days each summer, and increase the frequency of extreme heat events.

In addition to local threats, the community also plays a key role in supporting emergency response throughout the region; including regularly hosting communities across Northwestern Ontario evacuated for flood, wildfire, or infrastructure failures.

Hazards are exacerbated by local social inequities that contribute to community vulnerability; including relatively high rates of homelessness, food insecurity, and chronic illness including addiction; compounded by barriers to healthcare access and other critical supports.

Despite these challenges, Thunder Bay benefits from strong community networks, a capable emergency services sector, and a culture of collaboration between government, Indigenous partners, and local organizations. These strengths form the foundation for a resilient, coordinated emergency management system.

[1] McConkey, S., Brar, R., Blais G., Hardy, M., Smylie, J. (2022). Indigenous Population Estimates for the City of Thunder Bay.

LEGAL AUTHORITY

The *Emergency Management and Civil Protection Act (*the *Act*) is the legal authority for all municipal and ministry emergency response plans in Ontario.

The Act requires municipalities to develop, implement, and maintain an emergency management program, and adopt it with a by-law.

An emergency management program must consist of:

- An emergency plan;
- Training programs and exercises for employees of municipalities and other persons with respect to the provision of required services and procedures to be followed in emergency response and recovery activities. This includes an annual practice exercise for a simulated emergency incident in order to evaluate the municipality's emergency response plan and its own procedures;
- Public education on risks to public safety and on public preparedness for emergencies; and
- Any other element required for municipalities in standards of emergency management programs that may be developed by the Ministry of Emergency Preparedness and Response

Specific statutory appointments exist for the various key roles to support the overall management during an emergency. Ontario Regulation 380/04 describes emergency management standards for municipal emergency management programs.
The required elements consist of:

- Establishment of an Emergency Management Program Committee, (EMPC).
- Establishment of a Municipal Emergency Control Group (MECG)
- Development of an emergency response plan
- Implementation of an Emergency Operations Centre (EOC) with appropriate communications systems.
- Designation of an Emergency Information Officer (EIO); and
- Designation of a Community Emergency Management Coordinator (CEMC).

In accordance with Section 3(1) of the *Emergency Management and Civil Protection Act*, the City of Thunder Bay has enacted By-law 76/2021.

MUNICIPAL EMERGENCY MANAGEMENT PROGRAM COMMITTEE

Overall leadership in the development and delivery of the community's emergency management program is provided by the Thunder Bay Emergency Management Program Committee. The Committee meets a minimum of twice a year and is chaired by the Community Emergency Management Coordinator or their alternate to provide overall leadership in the development and delivery of the community's emergency management program.

The purpose of this committee is to:

- Review the City's emergency management program annually
- Provide advice to the Community Emergency Management Coordinator in the development of the emergency management work plan
- Support the development and delivery of emergency management program objectives, including exercises and staff training
- Make recommendations to Council for the continued development of the emergency management program
- Assist the Community Emergency Management Coordinator in meeting the legislated level of emergency management as dictated by the Province of Ontario

Membership includes:

- Mayor (Head of Council)
- Community Emergency Management Coordinator
- City Manager
- Chief of Thunder Bay Fire Rescue
- Chief of Superior North Emergency Medical Services
- Chief of Thunder Bay Police Service
- Commissioner of Infrastructure and Operations

EMERGENCY MANAGEMENT WORKING GROUP

The Emergency Management Program is supported by the Emergency Management Working Group, which incorporates both internal and external stakeholders to guide the continued evolution of the Emergency Management Program and collaboration on emergency management throughout the community.

Meetings do not require all members to be present and include designates from the EMPC committee where appropriate.

HAZARD PRIORITIZATION

As part of the City's Hazard Identification and Risk Assessment (HIRA) process, the City of Thunder Bay has determined that the community is vulnerable to numerous hazards. These hazards are grouped into three major categories:

Natural Events: Events such as severe weather, floods, blizzards, tornadoes, food or human health emergencies.

Human-Caused Events and Accidental Hazards: Incidents intended to do harm to public safety and security, civil disorder, wars, bomb threats, improvised explosive devices and improvised dispersal devices. Chemical, biological, radiological and/or nuclear agents may be used on their own, or in combination with these devices.

Technological & Infrastructure Disruptions: Incidents involving hazardous materials, utility and power failures, transportation accidents, aircraft crashes, water supply failures, building or structural collapse, critical resource shortages, or computer-related incidents.

The Hazard Identification and Risk Assessment process incorporates Hazard Probability, Consequence, Vulnerabilities, and Response Capacity in order to estimate impact to the community.

Work will be ongoing to estimate key drivers of risk, such as climate change, community growth, and demographic shifts to anticipate how risks may evolve in the years to come.

The HIRA report, Critical Infrastructure List, and Municipal Essential Services document are valuable references for all stages of emergency management to understand the impacts of hazards on our community.

MITIGATION

Mitigation involves proactive actions taken to reduce or eliminate the long-term risks posed by natural and human-made hazards.

In Thunder Bay, mitigation efforts are essential for enhancing community resilience by addressing vulnerabilities in infrastructure, land use, and environmental systems. These actions lay the foundation for a safer future by reducing the potential impact of emergencies before they occur.

Resilient Infrastructure

- Encourage climate-resilient building standards and retrofits for public facilities, emergency shelters, and vulnerable housing.
- Launch public education campaigns on household-level mitigation.
- Maintain prioritized critical infrastructure list, incorporating both municipally owned and external assets.
- Increase redundancy and spare inventory for critical infrastructure and components where feasible.
- Enhance vegetation management, fire breaks, and other protective measures around key infrastructure and residential zones.
- Promote nature-based solutions, such as green infrastructure, to absorb floodwaters and mitigate heat island effects.

Equity and Vulnerability Reduction

- Identify and map vulnerable populations for targeted mitigation support.
- Explore creation of a vulnerable population registry
- Support affordable housing retrofits to reduce risk from climate hazards.
- Partner with community organizations to engage vulnerable groups and co-develop mitigation strategies.

Integration

- All departments consider identified hazards in their decisions, for land-use planning, infrastructure design, and program investment.
- Use a climate equity lens in corporate reports to communicate the community risk and vulnerability considerations of municipal decisions.

Partnerships and Funding

- Apply for federal and provincial mitigation funding and capacity programs
- Formalize and routinely update agreements with critical stakeholders, including utilities, NGOs, First Nations, and neighbouring municipalities.

PREPARATION

Preparedness focuses on ensuring that individuals, organizations, and the municipality are ready to respond effectively to emergencies. This includes planning, training, public education, and resource coordination.

In Thunder Bay, preparedness activities strengthen the capacity of emergency responders and the public alike, ensuring a coordinated and timely response when disasters strike.

Emergency Planning and Coordination

- Review and update the municipal Emergency Response Plan annually to reflect current risks and lessons learned from recent events.
- Develop hazard-specific annexes (e.g., for wildfires, floods, hazardous materials, pandemics, evacuations) to support rapid, tailored responses.
- Consider opportunities to expand existing contingency plans for responding to some community needs without EOC activation (e.g. Severe Weather Plan for Vulnerable Populations).
- Encourage departments to maintain updated continuity of operations plans; outlining essential services and critical infrastructure dependencies.
- Routinely update critical infrastructure list based on identified impacts and dependences.
- Enhance mutual aid and coordination protocols with community organizations surrounding First Nations, municipalities, and provincial agencies.

Municipal Evacuation Planning

- Develop risk-based evacuation scenarios for both local evacuations and hosting; with associated neighbourhood evacuation strategies for various sizes of evacuated populations
- Clear decision-making criteria for issuing evacuation advisories or orders
- Communication templates with clear guidance for households; incorporating considerations for children, pets, and other population specific needs
- Engage with evacuees previously hosted in Thunder Bay to improve processes.

Staff Training

- Conduct regular IMS training sessions for municipal staff, elected officials, and emergency responders on roles, responsibilities, and procedures.
- All MECG members and alternates receive training on the emergency plan and on the IMS framework
- Support collaborative training opportunities with community partners and surrounding communities to increase regional capacity.
- Front line emergency responders conduct hazard-specific training in collaboration with provincial and federal agencies.
- Include municipal emergency management awareness training for administration, to improve awareness of the role of the MECG and EOC, and what supports may be available in an emergency

Emergency Exercises

- Maintain emergency exercise program, guiding annual emergency exercises.
- Facilitate annual multi-agency emergency exercises, simulating complex emergencies and disasters.
- Incorporate climate and equity lenses into scenario planning to ensure inclusive and forward-looking preparedness.
- Conduct formal debriefs and after-action reports after each exercise or real incident, documenting lessons learned and updating plans and training accordingly.

Public Education and Outreach

- Develop and promote personal preparedness campaigns, encouraging households to have emergency kits, plans, and contact lists.
- Create targeted materials to support groups with elevated or unique risks, particularly those unable to maintain 72-hour preparedness kits.
- Partner with local NGOs, faith groups, and Indigenous organizations to co-design culturally relevant preparedness initiatives.
- Offer recurring training sessions for community volunteers
- Explore implementation of community supported resilience hubs
- Host preparedness training for community groups, schools, and businesses, focused on emergency kits, evacuation planning, and hazard awareness, leveraging Ontario Corps support where possible.

Emergency Alerting and Communication

- Enhance public alerting systems, including integration with Alert Ready, local media organizations, and social media.
- Establish communication protocols for vulnerable and remote populations, including those without internet or cell service.
- Prepare pre-scripted messages for priority hazards to ensure timely and consistent communication.

Resource Management and Logistics

- Maintain and regularly update inventories of emergency supplies (e.g., cots, water, PPE) for reception and evacuation centres.
- Establish agreements with suppliers and service providers for rapid access to food, fuel, transportation, and shelter.
- Develop plans for spontaneous donations and volunteer management during large-scale emergencies

Integration with Provincial and Federal Systems

- Ensure municipal training aligns with Federal and Provincial standards
- Take part in regional emergency exercises where feasible.
- Explore Federal and Provincial training, funding, and guidance documents where available.

Equity-Focused Preparedness

- Ensure preparedness materials and plans address barriers faced by marginalized populations.
- Create tailored outreach for high-risk groups, including people living in poverty, those experiencing homelessness, and Indigenous youth.
- Use an equity impact lens to evaluate preparedness policies and identify gaps.
- Introduce equity and cultural competency training for emergency management personnel

RESPONSE

The response phase encompasses immediate actions taken during and immediately after an emergency to protect life, property, and the environment.

In Thunder Bay, response efforts rely on coordinated operations, clear communication, and rapid deployment of resources; following Ontario IMS 2.0 guidance. This section outlines how the municipality will manage emergencies through efficient command structures and public safety strategies.

Incident Management System Response Goals

1. *Protect the safety of all incident responders and those affected by the incident*
2. *Save lives*
3. *Treat the sick and injured*
4. *Protect the health of those affected by the incident*
5. *Safeguard the continuity of government and critical services*
6. *Protect property and the environment*
7. *Prevent and/or reduce economic and social losses*

Emergency Response Plan Procedures

- Follow operating procedures, including the Municipal Emergency Response Plan, to respond to community emergencies
- Activate the Emergency Operations Centre as required
- Variations from plan should be clearly communicated and recorded

Emergency Operations Centre Facility

- Should be dedicated area to maintain availability of critical resources, including food; personal rest supplies; as well as regularly updated copies of relevant plans, forms, and procedures.
- Facility selected with accessibility and resilience in mind
- Should have IMS best practice equipment, including position identification vests
- Should be able to support both in-person and virtual meeting attendees in a hybrid format
- Checklists for EOC roles, including technical specialists and external agency representatives

Emergency Communications

- Issue timely, accurate, and accessible public alerts and instructions targeting affected populations
- Coordinate with community organizations to support consistent messaging.
- Create a public facing section of municipal website where citizens can find the most recent emergency releases and specialized instructions
- Produce regular communications updating city council on response progress, as well as guidance on redirecting community members to appropriate resources and informing internal staff on any changes to responsibilities.
- Support access to telecommunications connectivity for affected populations to access information; including considerations for device charging and internet connections at reception centres.

Health, Safety, and Well-being

- Deploy emergency mental health and crisis support services, for affected populations, emergency responders, and emergency managers
- Enforce personnel cycling to manage responder and EOC capacity. Duty time in the EOC should not exceed 14 consecutive hours and be followed by a minimum of 8 uninterrupted hours of rest time.

Resource Management and Mutual Aid

- Track the deployment and status of all municipal and partner resources (personnel, equipment, supplies).
- Request provincial or federal support if local capacity is exceeded.
- Implement mutual aid agreements with neighbouring communities

Special Populations and Equity Considerations

- Support seniors, people with disabilities, Indigenous residents, and non-English speakers through targeted outreach and tailored services.
- Use pre-identified community liaisons or navigators to provide inclusive response.

Documentation and Information Management

- Maintain detailed incident records, including decisions, actions, and resource deployment using IMS compliant forms.
- Prepare situation reports for internal and external partners.
- Begin collecting data for financial recovery and reimbursement tracking.

RECOVERY

Recovery is the process of restoring and rebuilding after an emergency, with a focus on returning the community to safe and sustainable conditions.

In Thunder Bay, recovery efforts will be guided by principles of resilience, equity, and collaboration. This section outlines short- and long-term recovery actions that support healing, rebuilding infrastructure, and strengthening the community for the future.

Recovery Coordination and Leadership

- Following significant incidents, designate a Recovery Coordination Team with relevant cross-sector representation.
- Develop a Recovery Action Plan with clear timelines, roles, and resource needs.
- Coordinate with external stakeholders as appropriate

Transition from Response to Recovery

- Formally declare transition from response to recovery phase.
- Deactivate EOC when appropriate and shift coordination to the Recovery Coordination Team.
- Conduct initial impact and needs assessment across sectors (housing, infrastructure, economy, etc.).

Restoration of Essential Services

- Prioritize restoration of:
    - Power, water, natural gas, and sewer services
    - Transportation routes
    - Telecommunications
- Coordinate closely with service providers and contractors.
- Monitor service accessibility, especially for vulnerable populations.
- Rebuild damaged infrastructure, evaluating opportunities to “build back better” with climate resilient design

Community Support and Social Services

- Provide ongoing support for displaced individuals and families.
- Re-establish and expand access to:
  - Housing and shelter support
  - Food, clothing, and transportation
  - Mental health and trauma counselling
- Collaborate with community partners (e.g., NGOs, health units, Indigenous organizations).

Public Communication and Engagement

- Continue regular communication with the public on progress and restored services
- Consider hosting community meetings and feedback sessions.
- Use accessible and inclusive communication channels.

Financial Recovery and Reimbursement

- Track and document all eligible costs related to emergency response and recovery.
- Apply for provincial (e.g., Municipal Disaster Recovery Assistance) and federal funding.
- Support residents and businesses in accessing relief funds and insurance claim

After-Action Review and Improvement Planning

- Hold one or more critical action debriefs following significant response actions to inform continual improvement.
- Publish mandatory After-Action Reviews (AAR) following exercises or EOC activation.
- Gather input from all responding agencies, stakeholders, and community members.
- Identify lessons learned and update emergency and recovery plans accordingly.
- Provide training and briefings based on AAR findings.

PROGRAM MAINTENANCE, REVISION, AND TESTING

The City of Thunder Bay's Emergency Management Program is developed and maintained by the Emergency Management Program Committee and Emergency Management Working Group under the authority of Municipal By-law 76/2021 and in accordance with the *Emergency Management and Civil Protection Act*.

ASSOCIATED DOCUMENTS

- Ontario IMS Guidance 2.0
- Emergency Response Plan
- Hazard Identification and Risk Assessment Report (*anticipated 2026)*
- Critical Infrastructure List
- Municipal Essential Services
- Contingency Plans
- Evacuation Plan
- Recovery Plan
- Severe Weather Plan for Vulnerable Populations
- Emergency Food Plan (*external*)