

City of Yellowknife After- Action Assessment: 2023 North Slave Complex Wildfires

Final Report
Prepared for the City of Yellowknife
June 2024





DISCLAIMER

KPMG LLP (KPMG) has been engaged by the Municipal Corporation of the City of Yellowknife ("the City") to develop an After-Action Assessment (AAA) of the City's emergency response to the 2023 North Slave Complex Wildfires (wildfire) which threatened the community, pursuant to the terms of an engagement agreement with the City dated December 4, 2023 (the Engagement Agreement). KPMG neither warrants nor represents that the information contained in this Report is accurate, complete, sufficient, or appropriate for use by any person or entity other than the City or for any purpose other than set out in the Engagement Agreement. This Report may not be relied upon by any person or entity other than the City, and KPMG hereby expressly disclaims any and all responsibility or liability to any person or entity other than the City in connection with their use of this Report.

The focus of this After-Action Assessment is on the events that took place during the 2023 North Slave Complex Wildfires, and therefore it does not include any actions taken by the City, partners or stakeholders following that period. Information was collected through a review of documentation and feedback collected from partners, stakeholders, and the public. Our assessment approach consisted of inquiry, survey, observation, comparison, and analysis of participant-provided information. KPMG relied on the completeness and accuracy of the information provided. This report focuses on making recommendations for how the City can enhance their overall readiness to manage future disaster events.

After delivery of this report, it is the responsibility of the City to conduct an assessment of observations and findings, make decisions regarding any implementation of recommendations, and consideration for any impacts that may result from the implementation of recommendations.



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The cover photo was provided as a courtesy by the Government of Northwest Territories for use in this report. This photo depicts Highway 3 between Behchokò and Yellowknife.

Executive summary

In the summer of 2023, the city of Yellowknife experienced a severe wildfire season that led to the unprecedented mass evacuation of around 19,000 residents. The Municipal Corporation of the City of Yellowknife (the City) played an important role in managing the wildfire response and evacuation process. To improve preparedness for future incidents, the City commissioned an independent After-Action Assessment (AAA) to evaluate the City's emergency response to the 2023 North Slave Complex Wildfires. This AAA provides a qualitative, evidence-based review of the City's actions during the 2023 wildfire season. This report summarizes the chronology of events leading up to, during, and after the evacuation of the city of Yellowknife, which correspond with the three phases of this emergency event.

3 Phases of the 2023 North Slave Complex Wildfires

- 1 Mitigation & Preparedness: the events and actions leading up to the evacuation;
- 2 Response: the events and actions during the evacuation; and
- 3 Recovery: the events and actions after the evacuation (e.g., re-entry).

Key findings for each of the three phases of this emergency event were derived from the analysis of internal City documents, publicly available information, virtual and in-person public engagement, and targeted stakeholder interviews. The key findings are organized across five themes and include 19 key strengths and successes in managing the wildfires, as well as 35 areas identified for future improvement.






Key Finding Themes

- 1 Cross-Agency Coordination;
- 2 Public Communications;
- 3 Considerations for Vulnerable Populations;
- 4 Emergency Operations Centre and Continuity Management; and
- 5 Evacuation Planning, Response, and Recovery.

By comparing these findings with emergency management and disaster risk reduction standards and leading practices, 26 recommendations are identified to address the 35 areas identified for future improvement. To support the prioritization of these recommendations for implementation, they have been assessed and ranked based on the time and effort required for implementation, as well as their relative impact on disaster risk reduction, the capability of the City across the four phases of emergency management and maintaining life safety.






Summary of Key Strengths and Successes

This report identifies 19 Key Strengths and successes from the management of the 2023 wildfires. These Key Strengths are elaborated throughout this report across five themes: Cross-Agency Coordination; Public Communications; Considerations for Vulnerable Populations; Emergency Operations Centre and Continuity Management; and Evacuation Planning, Response, and Recovery. They represent key actions taken by the City and other agencies that contributed to reducing risk to the city of Yellowknife and its residents in relation to the 2023 North Slave Complex Wildfires. These were valuable efforts and actions that should be reinforced in the planning for, response to, and recovery from of any future wildfire-related emergency event. For each Key Strength the entities associated or involved are also listed.

CROSS-AGENCY COORDINATION	ENTITY INVOLVED
 Considerable effort and resources were provided by contractors, and City staff for the installation of firebreaks and sprinklers, with support from volunteers for building firebreaks.	The City
 Interviews indicated that the coordination and communication between the City and the Government of the Northwest Territories (GNWT) Department of Environment and Climate Change (ECC) worked well throughout the wildfire season.	The City & the GNWT
 The City used the State of Local Emergency to re-allocate resources to mitigate risks of the 2023 North Slave Complex Wildfires.	The City
 Integration of representatives of the Yellowknives Dene First Nation (YKDFN) into the City Emergency Operations Centre (EOC) contributed to excellent coordination of response efforts and communications.	The City & YKDFN
 The City and YKDFN issued a joint Road to Re-Entry Plan and informed residents of the key dates for re-entry.	The City & YKDFN




PUBLIC COMMUNICATIONS

ENTITY INVOLVED

	The City provided some updates on measures being taken for community protection, including building firebreaks and installing sprinklers.	The City
	Regular updates were provided through press conferences livestreamed by the City on their website and by the City Mayor on Facebook.	The City & the GNWT
	Joint communications developed and released by the City and YKDFN.	The City & YKDFN
	Public communication was better coordinated for re-entry in comparison to the evacuation process.	The City & the GNWT
	The City provided residents with information about what to expect when returning to the city of Yellowknife, including specific actions they could take to ensure water and food safety.	The City





CONSIDERATIONS FOR VULNERABLE POPULATIONS

ENTITY INVOLVED

	Organizations supporting vulnerable populations are key sources of expertise for how to enhance preparedness to ensure all unique needs are met.	Vulnerable population organizations
	Organizations supporting vulnerable populations made substantial contributions in assisting their clients during the evacuation process.	Vulnerable population organizations
	Organizations supporting vulnerable populations contributed significant efforts to support their clients in the recovery and re-entry process.	Vulnerable population organizations

EMERGENCY OPERATIONS CENTRE AND CONTINUITY MANAGEMENT

ENTITY INVOLVED

	Despite gaps in the Incident Command System (ICS) or EOC training, City staff were able to activate a functional EOC and carry out the basic functions required.	The City
	City staff took initiative and contributed significant effort to supporting continuity of business operations during the emergency event.	The City
	The City identified the appropriate staff to fill key operational roles in the EOC throughout the evacuation.	The City
	Volunteers contributed significant time, effort, and resources to support the implementation of community protection measures.	Volunteers

EVACUATION PLANNING, RESPONSE & RECOVERY**ENTITY INVOLVED**

 The City identified internal capacity issues and made the appropriate requests for assistance from partner agencies.	The City
 The City responded to requests from the public for pet support by working with local animal welfare organizations and developing a clear process for owners to submit requests for pet retrieval and care.	The City & the GNWT

Summary of Recommendations

This report identifies 26 recommendations to address the 35 Areas for Future Improvement. Each recommendation is derived from standards and leading practices in emergency management and disaster risk reduction¹, and are organized across five themes: Cross-Agency Coordination; Public Communications; Considerations for Vulnerable Populations; Emergency Operations Centre and Continuity Management; and Evacuation Planning, Response, and Recovery.

Additional information for each recommendation is captured within the Recommendations section, including relevant key findings, the rationale for the recommendation including relevant standard or leading practice, and initial prioritization.

The following recommendations assume that the responsibility for their implementation rests with the City. This is based on the NWT Emergency Plan which was recently updated in 2024 and includes notable shifts in roles and responsibilities between the Government of Northwest Territories (GNWT) and Local Authorities. It is important to note that the updated NWT Emergency Plan does not include any considerations unique to the City as a Local Authority associated with emergency events. The experiences from the 2023 North Slave Complex Wildfires suggests it may be appropriate to consider whether the City is unique from other Local Authorities in the Northwest Territories as it relates to emergency events, particularly as it relates to roles and responsibilities between the City and the GNWT.

The City may make an agreement with the GNWT, or pro-actively submit formal requests for assistance to the GNWT associated with emergency management responsibilities, including any responsibilities associated with the following recommendations, if the City does not have the capacity to fulfill that responsibility. However, for the purposes of this report it is assumed no such agreement is in place, nor any pro-active request for assistance submitted.

CROSS-AGENCY COORDINATION

#	Recommendation
1	Involve partners and stakeholders in emergency planning efforts to ensure a shared understanding of roles and responsibilities and improve future coordination.
2	Coordinate with the GNWT to establish a formal decision-making process for shared responsibilities associated with declarations of states of emergency, Evacuation Notices, Alerts, and Orders, and other response and recovery related activities.
3	Coordinate with the GNWT to ensure a shared understanding and interpretation of the <i>Emergency Management Act</i>, particularly with respect to roles and responsibilities following the declaration of a Territorial State of Emergency by the GNWT.

¹ The United Nations Sendai Framework for Disaster Risk Reduction; the National Research Council National Guide for Wildland-Urban Interface (WUI) Fires; CSA Z1600:17 (R2022) – Emergency and Continuity Management Program; ISO 22315:2014 – Mass evacuation – Guidelines for planning; ISO 22319:2017 – Community resilience – Guidelines for planning the involvement of spontaneous volunteers; ISO 22322:2022 – Emergency management – Guidelines for public warning; ISO 22395:2018 – Community resilience – Guidelines for supporting vulnerable persons in an emergency; ISO 22396:2020 – Community resilience – Guidelines for information exchange between organizations.

#	Recommendation
4	Work with the GNWT to establish a common understanding of roles and responsibilities, including communication and coordination channels, to formalize information sharing and institutionalize the relationship between different government levels.
5	Coordinate with the GNWT on the designation and management of critical service workers during evacuation scenarios comparable to the 2023 North Slave Complex Wildfires.
6	Continue to partner with YKDFN by inviting one or more representatives to the City EOC during major activations to enhance the coordination of response actions and development and delivery of joint communications.
7	Regularly review and update the City of Yellowknife Community Wildfire Protection Plan (and comparable wildfire risk management documentation) and consider opportunities to coordinate with the GNWT and neighbouring communities on wildfire mitigation and risk reduction measures in advance of wildfire seasons.

PUBLIC COMMUNICATIONS

#	Recommendation
8	Collaborate and coordinate with the GNWT on public communications related to a city-wide evacuation to identify opportunities to align approach, timing, content, and audience prior to the release of information.
9	Develop a strategy for managing public information before, during and after evacuations to ensure that communications to the public are clear, accessible, informative, and timely. This strategy should include templates, draft messaging, guidelines, contact information, and channels for communication with partners and the public. The strategy should also include procedures for the timely issuance of Evacuation Notices, Alerts, and Orders through various communication channels.
10	Prepare and communicate materials to enhance public awareness of the City's wildfire mitigation and preparedness efforts that have been taken, are planned for, or are underway.

CONSIDERATIONS FOR VULNERABLE POPULATIONS

#	Recommendation
11	Consider opportunities to increase the accessibility and reach of information and guidance to support personal preparedness efforts.
12	Consider the needs of vulnerable populations in all evacuation planning, response and recovery activities and implement a system to register these individuals to

	ensure their safety during evacuation and re-entry. Involve local organizations that support vulnerable populations in the planning efforts.
13	Establish a position within the City EOC that can be activated to coordinate with local organizations supporting vulnerable populations to enhance coordination and communication.
14	Provide advance and direct communications to organizations supporting vulnerable populations when the City is considering issuing an Evacuation Order. This will allow time for preparations to support these populations.

EMERGENCY OPERATIONS CENTRE AND CONTINUITY MANAGEMENT

#	Recommendation
15	<p>Develop an emergency management training plan for City staff that includes:</p> <ul style="list-style-type: none"> the frequency and scope of training; ICS training for all City staff that may serve in roles within and/or in support of the City's EOC; enhanced ICS Training (e.g., ICS 300 and ICS 400) for City staff that may serve in leadership roles within the City's Emergency Operations Centre (EOC) (e.g., Incident Command / EOC Director, Liaison Officer, Information Officer, Section Leads, etc.); and, an ongoing record of training completed.
16	Establish clear City EOC documentation processes to manage information, including templates, tracking documents, clear internal communication channels for the sharing of information, and documentation filing approaches.
17	Review and consider revisions to the City's EOC documentation based on lessons observed during the 2023 activation, including documentation guiding the activation of the City EOC and position-specific procedures.
18	Ensure the safety and wellbeing of staff activated to the City's EOC.
19	Conduct a risk assessment to identify risks to critical City services and potential impacts of disruptions on critical services and resources, to inform continuity planning efforts.
20	Establish and maintain a continuity management program for the City.
21	Develop continuity plans for the City across all departments, which include the identification of critical City services and the staff required to ensure the continuity of these services.

#	Recommendation
22	Plan for the involvement of spontaneous volunteers during emergency response and recovery. The planning effort should consider whether, how, and when spontaneous volunteers can support response and recovery efforts.

EVACUATION PLANNING AND RESPONSE

#	Recommendation
23	<p>Develop a detailed wildfire evacuation plan that incorporates:</p> <ul style="list-style-type: none"> • roles and responsibilities for the City and partner organizations; • evacuation decision procedures; • public communications procedures; • response procedures for partial or total evacuation of the community; • response procedures for supporting evacuees including consideration for the unique needs of vulnerable populations; • logistics processes and considerations relevant to evacuations; and • recovery and re-entry processes and considerations.
24	In collaboration with the GNWT, and as appropriate given interjurisdictional protocols, identify potential host locations for evacuees to support planning efforts. Where possible, pre-establish relationships, communication channels, and agreements.
25	Develop a clear understanding of what resources are anticipated to be required during future evacuations, and the capacity of the City to meet those requirements. For anticipated requirements beyond the City's capacity, consider preparing and delivering anticipated requests for assistance to the GNWT in advance of emergencies.
26	In collaboration with the GNWT and relevant local organizations, incorporate considerations and procedures for pets and animals in the City's evacuation plan.

Introduction

Climate change is increasing the intensity of wildfires, and jurisdictions across Canada continue to experience more challenging and complex wildfire seasons.² With increasing wildfire threat comes a greater need for effective approaches to disaster risk management, emergency management, and business continuity. Although each of these lines of effort should be addressed through an all-of-society approach, the Municipal Corporation of the City of Yellowknife (“the City”) has a significant role in disaster risk management within the Northwest Territories, which spans all four phases of emergency management: mitigation, preparedness, response, and recovery.

As a local authority in the Northwest Territories, the City has duties and responsibilities to coordinate local emergency management activities within their jurisdiction and are required to maintain plans and resources to manage emergencies that threaten or impact the community.³ As emergencies become more difficult to be managed locally due to resource and/or capability constraints, additional levels of support may be activated at the regional, territorial, and federal government.

In 2023, the City’s approach to disaster risk management and emergency management was tested by an extreme wildfire season that threatened the city of Yellowknife and its residents. Following the wildfire season, the City commissioned a third-party, independent After-Action Assessment of the City’s actions before, during, and after this challenging wildfire season. The purpose of this After-Action Assessment is to identify the City’s strengths and successes, as well as opportunities for improvement in relation to the 2023 North Slave Complex Wildfires and provide recommendations for actions based on leading practices and industry standards to reduce risk from future wildfires and enhance response and recovery efforts. The strengths and opportunities identified are a function of gathering and analyzing data, information, and unique viewpoints across a range of sources, which includes the review of relevant documentation, virtual and in-person public engagement, and targeted interviews.

² Shingler, Benjamin. “Five charts to help understand Canada’s record-breaking wildfire season,” CBC News, October 19, 2023, <https://www.cbc.ca/news/climate/wildfire-season-2023-wrap-1.6999005>.

³ Northwest Territories Emergency Plan, Municipal and Community Affairs, Government of the Northwest Territories, April 2024, https://www.maca.gov.nt.ca/sites/maca/files/resources/nwt_emergency_plan_-_april_2024.pdf.

Background on Wildfires

WILDFIRES IN THE NORTHWEST TERRITORIES

Wildfires are not new to the Northwest Territories: they are part of a natural cycle that proves crucial to the healthy life cycle of boreal forests.⁴ Typically, these fires are not a threat because of the region's small population and concentrated settlements.⁵ They are generally left to burn naturally, ultimately renewing the landscape. Recent wildfire activity, however, has been unprecedented and the narrative is one of augmenting severity. Major peaks in the total hectares burned in the Northwest Territories were experienced in 1979, 1994 and 1995. However, the impacts of these wildfires in terms of hectares burned were surpassed by the 2014 and 2023 wildfire seasons.⁶

Climate change is a key driver of the increased wildfire severity in the Northwest Territories.⁷ Lightning is the leading cause of fire in the boreal forests of the region, and lightning strikes are projected to double in the near future. Additionally, with higher greenhouse gas emissions and drier conditions, vegetation will become more prone to fire ignition caused by lightning strikes.⁸ These two drivers amount to higher fire risk.

Based on 20-year averages, 245 fires burn in the Northwest Territories in a typical year, targeting 570,000 hectares of land and requiring a 7.5 million dollars firefighting budget.⁹ In 2014, there was a significant increase, with 385 fires burning a total of 3.4 million hectares of forest. The 2014 wildfire season was spurred by moderate to severe drought and atypical meteorological conditions. These fires occurred within the bounds of the communities of Kakisa, Hay River, Whati and Gameti, while 8 other communities experienced elevated risk levels, including Yellowknife¹⁰. To support response to these wildfires, the GNWT Department of Environment and Natural Resources recruited 650 fire crew members from across Canada and Alaska. The disaster response efforts generated \$56.1 million in costs.¹¹

In 2023, the Northwest Territories experienced another significant wildfire season, with 299 fires burning over 4 million hectares across the territory. These 2023 fires required massive response resources and resulted in 12 community evacuations, including the city of Yellowknife, displacing more than two-thirds of Northwest Territory residents from their homes.¹² The wildfire events across

⁴ Whitman, Ellen et al. Short-interval wildfire and drought overwhelm boreal forest resilience. *Scientific Reports, Nature Research*, 9:18796 (2019). <https://link.springer.com/content/pdf/10.1038/s41598-019-55036-7.pdf>

⁵ Shingler, Benjamin. "What's driving the powerful wildfires in the Northwest Territories," *CBC News*, August 17, 2023, <https://www.cbc.ca/news/climate/northwest-territories-wildfires-1.6939337>.

⁶ Murphy, Robert P. "Trends in Canadian Forest Fires, 1959-2019," *Fraser Institute*, 2020, <https://www.fraserinstitute.org/sites/default/files/trends-in-canadian-forest-fires-1959-2019.pdf>

⁷ Hessilt, Thomas D. "Future increases in lightning ignition efficiency and wildfire occurrence expected from drier fuels in boreal forest ecosystems of western North America," *Environmental Research Letters*, 17 054008, April 19, 2022, <https://iopscience.iop.org/article/10.1088/1748-9326/ac6311/meta>.

⁸ Hessilt, Thomas D. "Future increases in lightning ignition efficiency and wildfire occurrence expected from drier fuels in boreal forest ecosystems of western North America," *Environmental Research Letters*, 17 054008, April 19, 2022, <https://iopscience.iop.org/article/10.1088/1748-9326/ac6311/meta>.

⁹ Hinchey, Garrett. "2014 N.W.T. fire season report: What you need to know," *CBC News*, May 5, 2015, <https://www.cbc.ca/news/canada/north/2014-n-w-t-fire-season-report-what-you-need-to-know-1.3061930>.

¹⁰ "2014 Fire Season Review Report," Government of Northwest Territories, last modified May 4, 2015, https://www.gov.nt.ca/sites/ecc/files/web_pdf_fmd_2014_fire_season_review_report_4_may_2015.pdf#:~:text=Twenty-year%20averages%20suggest%20the%20NWT%20should%20experience%20approximately,percent%20of%20the%20forested%20land%20in%20the%20NWT

¹¹ "2014 Fire Season Review Report," Government of Northwest Territories, last modified May 4, 2015, https://www.gov.nt.ca/sites/ecc/files/web_pdf_fmd_2014_fire_season_review_report_4_may_2015.pdf#:~:text=Twenty-year%20averages%20suggest%20the%20NWT%20should%20experience%20approximately,percent%20of%20the%20forested%20land%20in%20the%20NWT

¹² "Shane Thompson: Historic 2023 Wildfire Season," Government of Northwest Territories, September 28, 2023, <https://www.gov.nt.ca/en/newsroom/shane-thompson-historic-2023-wildfire-season>



the Northwest Territories created costs estimated between \$185 to \$200 million.¹³ Within this estimate, insured losses from the city of Yellowknife and Behchokò totaled around \$30 million.

THE 2023 NORTH SLAVE COMPLEX WILDFIRES

The 2023 wildfire season in the Northwest Territories was marked by an early start and high-risk levels due to record temperatures, little rain, and severe drought. In August 2023, a complex of wildfires in the North Slave region threatened the city of Yellowknife, requiring an emergency response which led to the mass evacuation of the city. Between August and September 2023, approximately 19,000 people (95% of the city's total population of 20 000) were evacuated from the city. Extreme winds and dry conditions drove a wildfire west of the city to 16km from the city boundary. No lives were lost due to the wildfire, but there were severe impacts on general wellbeing, mental health, and finances. Some homes and cabins were burned in the neighbouring communities of Behchokò and south of Hay River, and the Town of Enterprise was devastated. No buildings were lost within the city of Yellowknife's municipal boundaries, but there were significant costs related to the evacuation of its residents.¹⁴

¹³"Feds pay out \$84M 'advance' for disastrous N.W.T. wildfire season," CBC News, December 20, 2023, <https://www.cbc.ca/news/canada/north/feds-promise-84m-advance-payment-for-disastrous-n-w-t-wildfire-season-1.7065239>.

¹⁴"Insured evacuation costs, wildfire damages total \$60M for Hay River, Yellowknife," CBC News, November 24, 2023, <https://www.cbc.ca/news/canada/north/yellowknife-hay-river-wildfires-lead-to-over-60-million-in-insurance-claims-1.7038410>.

After-Action Assessment Approach

PURPOSE

The City commissioned KPMG LLP through a competitive process to lead an independent After-Action Assessment (AAA) of the City's emergency response to the 2023 North Slave Complex Wildfires that threatened the community. The purpose of this AAA is to capture what worked well in the City's planning for, response to, and recovery from the 2023 North Slave Complex Wildfires and identify recommendations for improvement to the City's disaster risk and emergency management systems. The intention of the report is not to apportion blame or liability, or to assess the performance of any individual. Rather, it is a tool to support the City in its continuous improvement journey to be more prepared for, and respond more effectively to, any future wildfire-related emergency.

SCOPE

This After-Action Assessment is focused on the role and actions of the City leading up to, during, and after the evacuation of the city of Yellowknife. However, lack of clarity remains with respect to the roles and responsibilities of the City and the GNWT in relation to emergency management. It is out of the scope of this report to assess and make determinations in relation to that lack of clarity. As stated in the Sendai Framework for Disaster Risk Reduction, "an all-of-society engagement and partnership is required for disaster risk reduction". Hence, partner organizations are encouraged to work collaboratively to implement the recommendations within this report in line with their individual roles and responsibilities.

This assessment does not claim to fully represent all the actions, responsibilities, or perspectives involved in the 2023 wildfire response. However, since emergency management involves many levels of government and partners, references are made to coordination between the City, the GNWT, and Yellowknives Dene First Nation (YKDFN), as well as other partners.

The scope of this assessment includes analysis of the legislative and regulatory frameworks for emergency management in the Northwest Territories, the City's existing framework for emergency management, such as existing emergency plans and processes, as well as components of the Northwest Territories' emergency management system that apply to the City. It also considers the City's implementation of existing preparedness, planning, response, and recovery frameworks, consideration for the unique needs of vulnerable populations, the Incident Command System (ICS) and activation of the City's Emergency Operations Centre (EOC). Furthermore, this assessment includes review of the decision-making process for addressing disaster risks and coordinating response activities.

APPROACH

This AAA is a qualitative, evidence-based review of actions taken before, during, and after the City's emergency response to the 2023 North Slave Complex Wildfires, which included the evacuation of the city of Yellowknife. To conduct this AAA, a mixed-methods approach was used, including gathering of documentation and data, public, partners and stakeholder engagement, analysis, and reporting. Details on the methodology used for this assessment are included in Appendix A. A summary of the stakeholder and partner engagement approach, as

well as a list of the stakeholders and partners engaged during the assessment can be found in Appendix B. Results of a PlaceSpeak survey shared with the public can be found in Appendix C.

Key concepts that guide Emergency Management are outlined in Appendix D, and an overview of the existing Legislation, Regulations and Emergency Management Plans is included in Appendix E. Appendix F outlines the Northwest Territory's Emergency Management System as a whole, including the levels of government organization.

Phases of the Emergency Event

Figure 1 describes the phases of emergency management, however, for the purpose of this report, the findings of this analysis are organized by the three phases of this emergency event.

- 1 **Mitigation & Preparedness** – The events and actions leading up to the evacuation.
- 2 **Response** – The events and actions during the evacuation.
- 3 **Recovery** – The events and actions after the evacuation (e.g., re-entry).

As further depicted in Figure 1, **Phase 1 – Mitigation and Preparedness** represent the pre-event phase of the emergency event, encompassing both the strategies and activities undertaken prior to the evacuation of the city of Yellowknife, as well as efforts to reduce the risk of the wildfires and other hazards.

Phase 2 – Response involves all of the actions and activities related to the evacuation of the city of Yellowknife and includes communication, search and rescue, emergency medical assistance, and the delivery of emergency social supports.

Phase 3 – Recovery includes all of the actions and activities related to the re-entry of community members.

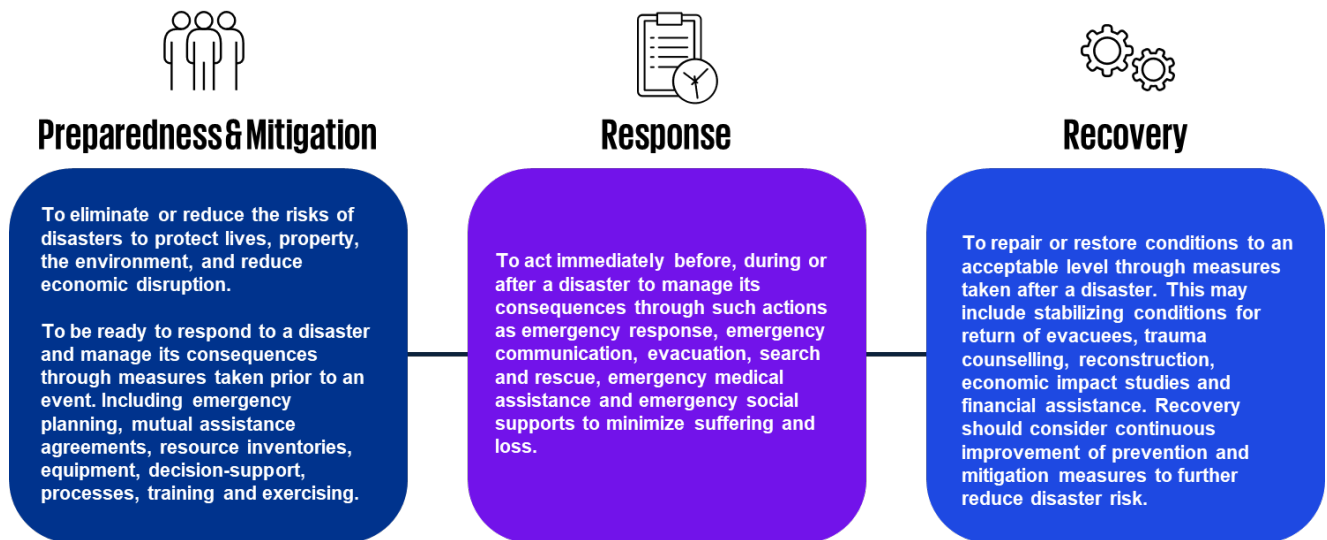


Figure 1: Phases of Emergency Management



Key Findings and Recommendations

This report outlines the main findings of the review and analysis of data collected from internal documentation from the City, public-facing documentation, and feedback shared by stakeholders, partners, and the public. This report highlights aspects of the 2023 wildfire response that went well and identifies learnings that can be addressed to better mitigate, prepare for, respond to, and recovery from future wildfire related disasters.

Key findings were analyzed in accordance with leading practices and standards to inform the development of evidence-based recommendations, including standards from the Canadian Standards Association (CSA) and the International Organization for Standardization (ISO). The standards and leading practices used for this report include:

- United Nations Sendai Framework for Disaster Risk Reduction;
- National Research Council National Guide for Wildland-Urban Interface (WUI) Fires;
- CSA Z1600:17 (R2022) Emergency and Continuity Management Program;
- ISO 22315:2014 – Mass Evacuation – Guidelines for planning;
- ISO 22319:2017 – Community resilience – Guidelines for planning the involvement of spontaneous volunteers;
- ISO 22322:2022 – Emergency management – Guidelines for public warning;
- ISO 22395:2018 – Community resilience – Guidelines for supporting vulnerable persons in an emergency; and
- ISO 22396:2020 – Community resilience – Guidelines for information exchange between organizations.

Key findings for each of the three phases of this emergency event are separated into two categories, **Key Strengths** along with the entities associated or involved, and **Areas for Future Improvement** along with the associated responsible entities.

Representative Symbol	Category	Responsibility
	Key Strength	Entities involved
	Area for Future Improvement	Responsible entities

Considerations

Best efforts have been made to determine which agencies had sole or shared responsibilities in relation to Areas for Future Improvement based on the roles and responsibilities described in the NWT Emergency Plan publicly available during the 2023 North Slave Complex Wildfires, and the requests for assistance made to the GNWT by the City. However, uncertainty remains between the City and GNWT regarding roles and responsibilities for different functions related to the evacuation, and it is beyond the scope of this review to conduct a full assessment and make determinations of these roles and responsibilities.

Initial Recommendation Prioritization

All of the recommendations provided in this report are important actions for reducing disaster risk and increasing emergency preparedness and response capability of the City. However, recognizing resource constraints in addressing every recommendation immediately, there is value in considering which recommendations will have the greatest impact and the potential effort associated with addressing each recommendation.

To support the City's considerations in addressing the recommendations in this report, each recommendation has been assessed based on potential relative effort to implement, and potential relative impact, once fully implemented, to reduce disaster risk and/or have a large positive impact on life safety and/or significantly impact the City's capability across the four phases of emergency management.

The following criteria were used to conduct an initial assessment and assign a quadrant from the Effort/Impact Matrix (see Figure 2) to each recommendation.

- **Higher Impact:** Direct impact to life safety and/or strong connection to disaster risk reduction and/or significant increase the City's capability across the four phases of emergency management.
- **Lower Impact:** No direct impact to life safety and/or minimal connection to disaster risk reduction and/or minimal impact on the City's capability across the four phases of emergency management.
- **Higher Effort:** Greater than 6 months effort for one full-time employee and/or significant multi-partner involvement.
- **Lower Effort:** Less than 6 months effort for one full-time employee and/or little/no multi-partner involvement.

Each recommendation was categorized based on these criteria. However, because of the relative subjectivity of these categories, and due to the different ways in which recommendations can be addressed, assignment of a recommendation to a specific quadrant should not be viewed as a definitive hierarchy of importance, but rather assessed in conjunction with other recommendation specific considerations and information when making final prioritization determinations.



Figure 2: Effort/Impact Matrix for Initial Recommendation Prioritization

Quick Wins – Recommendations identified as requiring lower effort to implement and having a higher impact on life safety and/or disaster risk reduction should be considered at or near the highest priority to address. Addressing these recommendations are likely to have a material impact in reducing disaster risk associated with wildfires and increasing the City’s capability across the four phases of emergency management. These recommendations also have the benefit of having the potential to be addressed in a relatively short period of time with fewer resources.

Major Projects - Higher effort and higher Impact recommendations should be considered in conjunction with ‘Quick Wins’ when making final recommendation prioritization decisions. ‘Major Projects’ have the potential to significantly impact disaster risk reduction, life safety, and/or the City’s capability across the four phases of emergency management, however, addressing these recommendations requires additional planning due to the additional time and effort needed to implement. Even with limited resources, one or more ‘Major Projects’ may be important to address in parallel with a selection of ‘Quick Wins’.

Incremental Tasks – By in large, recommendations requiring lower effort and having a lower impact should be considered once the most important ‘Quick Wins’, and potentially the most important ‘Major Projects’, have been implemented. These recommendations form elements of a mature emergency management program but generally are not the highest priority to address. Consider these recommendations as time allows or when resources become periodically available.

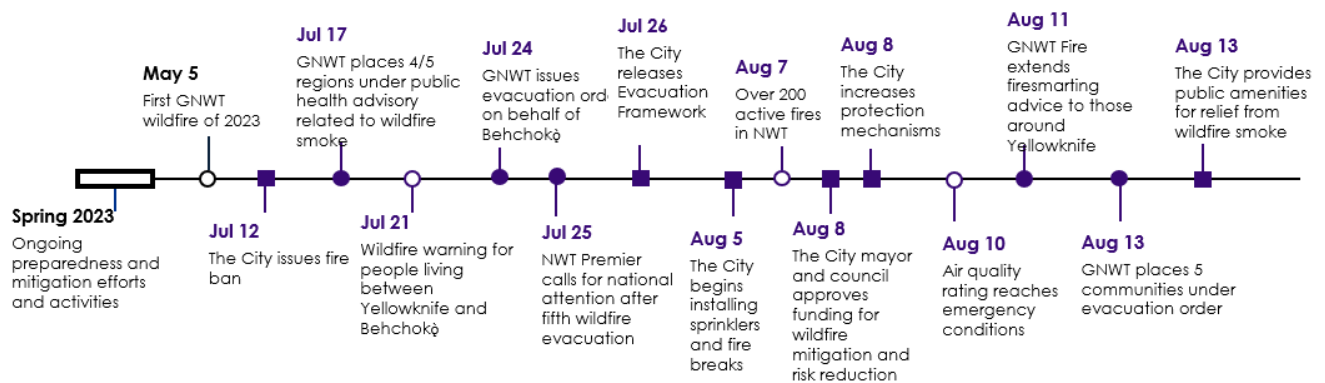
Future Opportunities – Any entity with emergency management responsibilities should continually seek to reduce their disaster risk and increase their emergency management capabilities. ‘Future Opportunities’ represent recommendations that should be considered once an entity reaches a higher level of maturity through the implementation of ‘Quick Wins’, ‘Major Projects’, and ‘Incremental Tasks’.

Timeline of Events for the 2023 Wildfire Season

The following sections present a timeline of events covering the Mitigation and Preparedness, Response, and Recovery phases during the 2023 wildfire season that impacted the city of Yellowknife and the broader Northwest Territories. Below is a legend for the timeline events:



MITIGATION AND PREPAREDNESS TIMELINE



The 2023 wildfire season in the Northwest Territories was predicted to start early and pose a high risk due to record temperatures, little rain, and severe drought.¹⁵ The first two wildfires of the 2023 season were reported outside of Fort Smith on May 5, almost a month earlier than normal.¹⁶ As the season progressed, the City implemented a fire ban as a proactive measure to reduce the risk of fires starting from campfires, bonfires or other flames within Yellowknife's city limits.¹⁷ By July 17, the Northwest Territories had placed four of their five regions (Dehcho, North Slave, South Slave, Sahtu) under public health advisory related to wildfire smoke.¹⁸

On July 21, the GNWT issued a warning for people with cabins or homes between the city of Yellowknife and Behchok̄ to be on alert and ready to evacuate due to nearby wildfire.¹⁹ The Department of Environment and Climate Change clarified that there was no current risk to the

¹⁵ Williams, Ollie. "First NWT wildfires of 2023 reported outside Fort Smith," Cabin Radio, May 5, 2023, <https://cabinradio.ca/128307/news/environment/wildfires/first-nwt-wildfires-of-2023-reported-outside-fort-smith/#:~:text=The%20Northwest%20Territories%E2%80%99%20first%20two%20wildfires%20of%20the,have%20been%20caused%20by%20an%20escaped%20burn%20pile.>

¹⁶ Williams, Ollie. "First NWT wildfires of 2023 reported outside Fort Smith," Cabin Radio, May 5, 2023, <https://cabinradio.ca/128307/news/environment/wildfires/first-nwt-wildfires-of-2023-reported-outside-fort-smith/#:~:text=The%20Northwest%20Territories%E2%80%99%20first%20two%20wildfires%20of%20the,have%20been%20caused%20by%20an%20escaped%20burn%20pile.>

¹⁷ "Fire Ban Beginning July 12, 2023," City of Yellowknife, July 11, 2023, <https://www.yellowknife.ca/en/news/fire-ban-beginning-july-12-2023.aspx>.

¹⁸ Williams, Ollie. "Almost entire NWT now under a wildfire smoke health advisory," Cabin Radio, last updated July 20, 2023, <https://cabinradio.ca/136291/news/environment/wildfires/almost-entire-nwt-now-under-a-wildfire-smoke-health-advisory/>.

¹⁹ Williams, Ollie. "Wildfire warning for people living between Yellowknife and Behchok̄," Cabin Radio, July 21, 2023, <https://cabinradio.ca/136735/news/yellowknife/wildfire-warning-for-people-living-between-yellowknife-and-behchok%C7%AB/>.

city of Yellowknife or Behchokǫ. Residents were advised to prepare their emergency kits and critical personal belongings. Air tankers were working to slow wildfire progress and Northwest Territories Fire crews were working to install sprinklers on cabins and homes in the area.²⁰

On July 24, the GNWT issued an Evacuation Order for the residents of Behchokǫ, late Monday afternoon, a few hours after the community was put under Evacuation Alert.²¹ The City prepared to welcome Behchokǫ evacuees, who had been advised to seek shelter in the city of Yellowknife. They were instructed to register with the Yellowknife Health and Social Services Authority at the Multiplex once they arrived.²² On July 25, the Northwest Territory's Premier expressed the need for national attention to the situation in the Northwest Territories, as five communities (Behchokǫ, Hay River, Kátł'odeeche First Nation, Sambaa K'e and Wekweètì) had already been forced to flee their homes due to escalating wildfires.²³

As the wildfires continued to expand throughout the Northwest Territories, the City posted on their website that the city of Yellowknife was not under threat at the time. The City released a preliminary Evacuation Framework to the public on July 26, outlining two different kinds of evacuations that could happen. They included sample evacuation instructions and information.²⁴

It was anticipated that by August 5, if propelled eastward by expected winds, the wildfire to the west of the city of Yellowknife could approach as close to 30km to the municipal boundary. The city of Yellowknife residents were advised to initiate FireSmarting measures with the aim of mitigating future risk. The City began efforts to install sprinklers and build firebreaks on the city of Yellowknife's western side.²⁵ As August 7 approached, there were 200 active wildfires in the Northwest Territories; however, the city of Yellowknife was still at lower risk as the fire's closest point was 35km from the municipal boundary.²⁶ On August 8, the City's Mayor and council approved a request for funding on wildfire mitigation and risk reduction in the city of Yellowknife.²⁷ The City began work to increase precautionary safety measures and set up primary, secondary, and tertiary breaks as well as sprinklers in areas at risk.²⁸

By August 10, the air quality in the city of Yellowknife, Inuvik, Tsiigehtchic, Tulita, Whatì, Behchokǫ and Fort Resolution were rated as 'emergency conditions', and residents were advised to avoid exposure.²⁹ The GNWT Department of Environment and Climate Change (ECC) anticipated

²⁰Williams, Ollie. "Wildfire warning for people living between Yellowknife and Behchokǫ." Cabin Radio, July 21, 2023, <https://cabinradio.ca/136735/news/yellowknife/wildfire-warning-for-people-living-between-yellowknife-and-behchok%C7%AB/>.

²¹ "NWT Emergency Response Update – July 25, 2023 4:30 pm," Government of the Northwest Territories, July 25, 2023, <https://www.gov.nt.ca/en/newsroom/nwt-emergency-response-update-july-25-2023-430pm>.

²² "Behchokǫ, N.W.T., ordered to evacuate due to wildfire burning nearby," CBC News, July 24, 2023, <https://www.cbc.ca/news/canada/north/behchoko-evacuation-wildfire-1.6916369>.

²³ Williams, Ollie. "NWT premier calls for 'national attention' after fifth wildfire evacuation," Cabin Radio, July 25, 2023, <https://cabinradio.ca/137262/news/politics/nwt-premier-calls-for-national-attention-after-fifth-wildfire-evacuation/>.

²⁴ Hudson, April. "Here's what Yellowknife plans to do if a wildfire ever hits," CBC News, last updated July 27, 2023, <https://www.cbc.ca/news/canada/north/here-s-what-yellowknife-plans-to-do-if-a-wildfire-ever-hits-1.6919897>.

²⁵ Williams, Ollie. "Yellowknife starts on sprinklers, fire breaks as funding is unlocked," Cabin Radio, August 5, 2023, <https://cabinradio.ca/139272/news/yellowknife/yellowknife-starts-on-sprinklers-fire-breaks-as-funding-is-unlocked/>.

²⁶ Williams, Ollie. "What's the NWT fire situation at the start of the week?" Cabin Radio, August 7, 2023, <https://cabinradio.ca/139528/news/yellowknife/whats-the-nwt-fire-situation-at-the-start-of-the-week/>.

²⁷ Blake, Emily. "How Yellowknife is ramping up its wildfire protection," Cabin Radio, August 8, 2023, <https://cabinradio.ca/139699/news/yellowknife/how-yellowknife-is-ramping-up-its-wildfire-protection/#:~:text=NWT%20Fire%20has%20suggested%20that%20cabin%20owners%20on,a%20self-evacuation%20plan%20in%20place%20as%20precautionary%20measures>.

²⁸ "N.W.T., Yellowknife upping protection as city is surrounded by wildfires," CBC News, last updated August 8, 2023, <https://www.cbc.ca/news/canada/north/nwt-yellowknife-upping-wildfire-protection-1.6930431>.

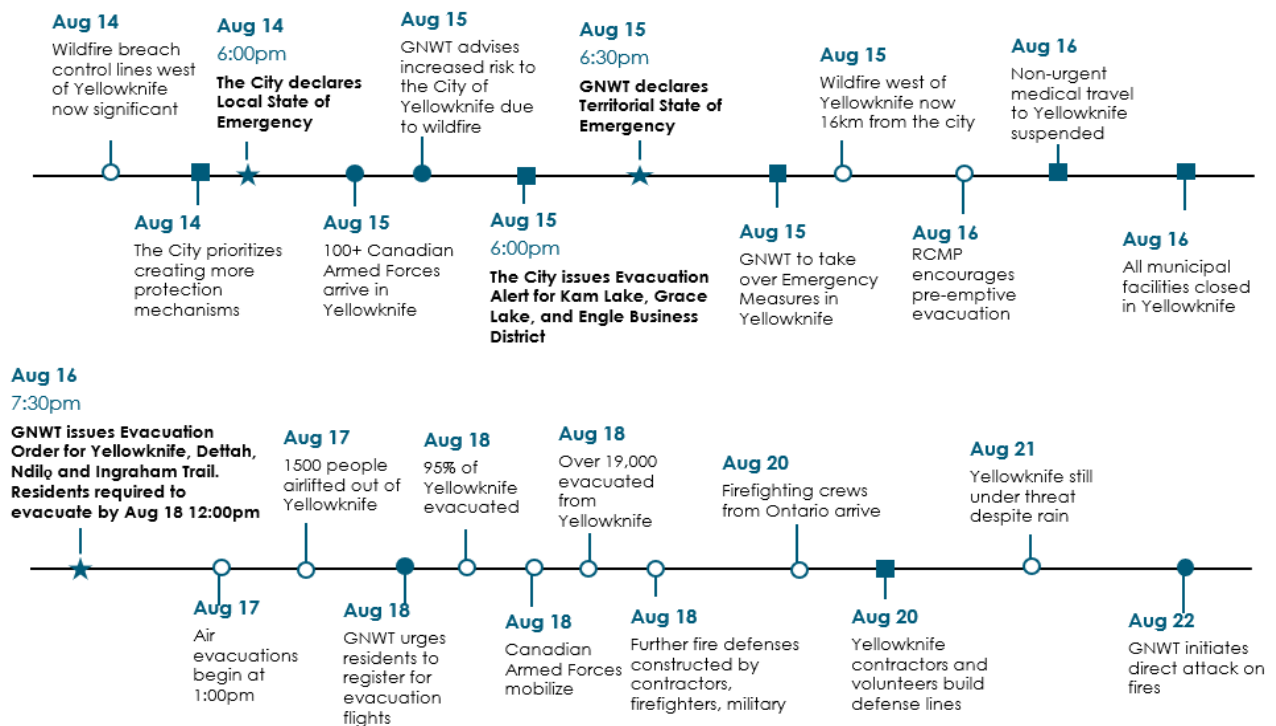
²⁹ Williams, Ollie. "This smoke is horrific. How long will it last?" Cabin Radio, August 10, 2023, <https://cabinradio.ca/139963/news/yellowknife/this-smoke-is-horrific-how-long-will-it-last/>.

increased winds on August 11, which could exacerbate the situation by spreading heavy smoke and ash over the city of Yellowknife, Dettah and Ingraham Trail. As further mitigation efforts, the GNWT began extending FireSmarting advice to Yellowknife residents.³⁰

The wildfires escalated rapidly and by August 13, five Northwest Territories communities (Hay River, the Kátł'odeeche First Nation, Enterprise, Fort Smith and Jean Marie River) were all placed under Evacuation Order.³¹ Heavy smoke blew into the city of Yellowknife as wildfires burning in the region grew. On August 13, the City posted on their website that despite the increasingly smokey conditions, the community was not at risk due to the ongoing wildfires and that measures were being taken to increase wildfire protection. To provide relief from the smoke, the City gave free public access to the fieldhouse, library, and visitor information centers.³²

RESPONSE TIMELINE

Following the City's announcements regarding public amenities for smoke relief, the start of the Response phase was marked by the significant breach of control lines on August 14.



On August 14, Northwest Territories Fire officials encountered challenges with battling the wildfires near the city of Yellowknife. The persistent strong winds exacerbated the situation, causing the fire between Behchokè and the city of Yellowknife to breach control lines.³³ The

³⁰Williams, Ollie. "Dettah wildfire prep 'nothing to worry about,' First Nation says," Cabin Radio, August 11, 2023, <https://cabinradio.ca/140143/news/yellowknife/dettah-wildfire-prep-nothing-to-worry-about-first-nation-says/>.

³¹Cabin Radio. "As it happened: Sunday's evacuation of NWT communities," last updated August 14, 2023, <https://cabinradio.ca/140632/news/yellowknife/nwt-wildfire-latest-with-five-communities-evacuating/>.

³²Blake, Emily. "Evacuation order issued for three lakes along Ingraham Trail," Cabin Radio, August 13, 2023, <https://cabinradio.ca/140618/news/yellowknife/evacuation-order-issued-for-three-lakes-along-ingraham-trail/>.

³³CBC News. "Wildfire breach of control lines west of Yellowknife now 'significant'," August 14, 2023, <https://www.cbc.ca/news/canada/north/wildfire-yellowknife-highway-3-update-august-14-1.6935983>.

breach was classified as 'significant' by the fire officials, and they emphasized that their primary focus was to contain it. During the City Hall meeting that same day, the City's manager assured that they were utilizing all available resources, sprinklers, and fire breaks to manage the situation.³⁴ Based on wildfire risk advice provided by ECC wildfire experts, at 6:00pm on August 14, the City declared a State of Local Emergency, after an emergency council meeting was called earlier that day in response to the surrounding wildfires.³⁵ The City communicated that this measure would ensure that the community could implement preventative measures, and secure necessary equipment and resources to maintain the safety of its residents.³⁶

By August 15, more than 100 Canadian Armed Forces soldiers were mobilized to the area. Their goal was to assist with mop-up and patrol operations once the wildfires were under control, and to coordinate logistics for the safety of the community.³⁷ The mobilization of the Canadian Armed Forces eased the stress on the Northwest Territories' resources, allowing the Territory to focus on providing critical services to evacuees. Northwest Territories Fire officials warned that the risk to the city of Yellowknife from a wildfire west of the City was increasing.³⁸ As the day progressed, the wildfire became a serious threat to the city of Yellowknife. On August 15 at 6:00pm, the City issued Evacuation Alerts for Kam Lake, Grace Lake, and Engle Business District.³⁹ The City's Mayor advised that the Evacuation Alerts were a precautionary measure, urging residents in those areas to be prepared to evacuate on short notice.⁴⁰ Shortly after, at 6:30pm, the GNWT declared a Territorial State of Emergency (SOE).⁴¹ This declaration was made to allow the GNWT to acquire and deploy the necessary resources to support emergency management and protect the health and safety of residents.

The wildfire west of the city of Yellowknife progressed quickly, coming within 16km of the city of Yellowknife on August 15.⁴² The City made extensive progress in building firebreaks, installing sprinklers, and implementing other protection measures. The GNWT assumed responsibility for emergency procedures, with the Territorial Emergency Management Organization (TEMO) stepping in as the official lead in managing the wildfire situation.⁴³

As the wildfire continued to progress into August 16, the Royal Canadian Mounted Police (RCMP) encouraged pre-emptive evacuation, advising non-critical workers and their families to consider evacuating.⁴⁴ At around 7:30pm on August 16, the GNWT officially issued Evacuation

³⁴ CBC News. "Wildfire breach of control lines west of Yellowknife now 'significant'," August 14, 2023, <https://www.cbc.ca/news/canada/north/wildfire-yellowknife-highway-3-update-august-14-1.6935983>.

³⁵ City of Yellowknife. "Special Council Meeting – August 14, 2023 Agenda," August 14, <https://www.yellowknife.ca/en/news/special-council-meeting-august-14-2023-agenda.aspx>.

³⁶ Global News. "Yellowknife declares state of local emergency due to wildfires in Northwest Territories," The Canadian Press, August 14, 2023, <https://globalnews.ca/news/9894731/wildfires-shut-evacuation-routes-out-of-nwt-towns-some-being-transported-by-air/>.

³⁷ North Shore News. "City of Yellowknife declares state of local emergency due to wildfires," August 14, 2023, <https://www.nsnews.com/north-news/city-of-yellowknife-declares-state-of-local-emergency-due-to-wildfires-7404292>.

³⁸ Blake, Emily. "Wildfire closer to Yellowknife but 'not expected to reach' city soon," Cabin Radio, August 15, 2023, <https://cabinradio.ca/141592/news/yellowknife/wildfire-closer-to-yellowknife-but-not-expected-to-reach-city-soon/>.

³⁹ City of Yellowknife. "City of Yellowknife Issues Evacuation Alert for Areas of the City," August 15, 2023, <https://www.yellowknife.ca/en/news/city-of-yellowknife-issues-evacuation-alert.aspx>.

⁴⁰ Carroll, Luke. "Wildfire threat to Yellowknife deemed serious as parts of city on evacuation alert," CBC News, August 15, 2023, <https://www.cbc.ca/news/canada/north/nwt-premier-update-wildfires-1.6937511>.

⁴¹ Government of the Northwest Territories. "NWT Emergency Response Update - August 25, 2023 6:30 PM," August 25, 2023, <https://www.gov.nt.ca/en/newsroom/nwt-emergency-response-update-august-25-2023-630-pm>.

⁴² Blake, Emily. "Minister declares NWT-wide state of emergency," Cabin Radio, August 15, 2023, <https://cabinradio.ca/141808/news/environment/wildfires/minister-declares-nwt-wide-state-of-emergency/>.

⁴³ City of Yellowknife. "Government of the NWT to take over Emergency Measures," August 16, 2023, <https://www.yellowknife.ca/en/news/government-of-the-nwt-to-take-over-emergency-measures.aspx>.

⁴⁴ The Canadian Press. "'Phased evacuation' ordered for Yellowknife as wildfires continue to advance," APTN National News, August 16, 2023, <https://www.aptnnews.ca/national-news/phased-evacuation-ordered-for-yellowknife-as-wildfires-continue-to-advance/>.

Orders for the city of Yellowknife, Dettah, Ndilo and Ingraham Trail.⁴⁵ Residents were required to evacuate by 12:00pm on August 18.

All residents in the Yellowknife were ordered to start evacuating and the GNWT Minister of Environment and Climate Change and Municipal and Community Affairs announced that the evacuation would occur in phases.⁴⁶ The GNWT announced that air evacuations would begin on August 17 at 1:00pm, with subsequent flights at 2:00pm, 7:00pm, 8:00pm, and 8:30pm.⁴⁷ To support the evacuation process, airlines such as Air Canada and WestJet increased their normal flights out of Yellowknife. On August 17, approximately 1,500 people were successfully airlifted out of the city.⁴⁸ Another 22 outbound flights were scheduled for August 18, and the GNWT urged residents to register for flights as the August 18 12:00pm deadline for evacuation approached.⁴⁹ By August 18, 95% (about 19,000 people) of the city of Yellowknife had fled.⁵⁰ As the residents of the city were evacuating to safer locations, contractors, firefighters, and military personnel worked quickly to enhance fire defenses by building further fire breaks and sprinkler lines on the city of Yellowknife's western edge.⁵¹

On August 20, firefighting crews from Ontario joined the existing team of over 300 personnel, which included firefighters from Alberta and Whitehorse, to combat the fire threatening Yellowknife.⁵² With efforts from this team, along with over 20 contractors and volunteers supporting those contractors, the City was able to build defense lines that stretched approximately 25km.⁵³ Despite the wildfires advancing towards the City, the collective efforts of everyone, including firefighters, contractors, and volunteers, coupled with significant rain, kept the fire manageable. Although fire defense efforts saw some success, on August 21, the City's Mayor cautioned that the City remained at risk due to the deep-burning fire that spanned along a huge section of the defense line, which was being held down by weather conditions.⁵⁴ The GNWT wildfire information officer clarified that the Territory's objective was not to extinguish the fire completely, but to prevent it from causing unmanageable widespread damage.⁵⁵ On August 22, the ECC wildfire operations moved towards a direct attack approach, during which crews were deployed near the fire to perform measures like spraying water or applying

⁴⁵ Government of the Northwest Territories. "Evacuation Order for Yellowknife, N'dilo, Dettah, and Ingraham Trail," August 16, 2023, https://www.gov.nt.ca/sites/flagship/files/resources/evacuation_order_yellowknife_and_area_august_16_2023.pdf.

Cabin Radio. "As it happened: All of Yellowknife told to evacuate," August 16, 2023, <https://cabinradio.ca/142024/news/environment/wildfires/the-situation-facing-the-nwt-as-wednesday-dawns/>.

⁴⁶ Tran, Paula. "City of Yellowknife ordered to evacuate due to nearby N.W.T. wildfires," Global News, August 16, 2023, <https://globalnews.ca/news/9901527/yellowknife-evacuation-order-wildfires/>.

⁴⁷ CBC News. "People wait in line overnight for evacuation flights out of Yellowknife," August 17, 2023, <http://www.cbc.ca/news/canada/north/yellowknife-air-evacuation-begins-1.6939256>.

⁴⁸ CBC News. "About 1,500 people airlifted out of Yellowknife Thursday, more flights Friday," August 17, 2023, <http://www.cbc.ca/news/canada/north/nwt-wildfire-update-aug-17-1.6939679>.

⁴⁹ CBC News. "N.W.T. officials urge residents to register for wildfire evacuation," August 18, 2023, <http://www.cbc.ca/news/canada/north/yellowknife-fire-northwest-territories-canada-wildfire-aug-18-1.6940408>.

⁵⁰ CBC News. "95% of Yellowknife has now been evacuated due to wildfires," August 18, 2023, <http://www.cbc.ca/news/canada/north/northwest-territories-update-news-conference-wildfire-evacuations-1.6941214>.

⁵¹ Williams, Ollie. "With a little rain and a lot of hope, YK awaits a wildfire," Cabin Radio, August 18, 2023, <https://cabinradio.ca/144298/news/with-a-little-rain-and-a-lot-of-hope-yk-awaits-a-wildfire/>.

⁵² CBC News. "N.W.T. fire crews eye direct attack on Yellowknife wildfire as warm, windy weather resumes," August 20, 2023, <http://www.cbc.ca/news/canada/north/nwt-yellowknife-fire-update-august-20-2023-1.6941967>.

⁵³ CBC News. "Yellowknife 'still under a threat' despite rains in area, mayor says," August 21, 2023, <http://www.cbc.ca/news/canada/north/nwt-fire-update-aug-21-1.6942684>.

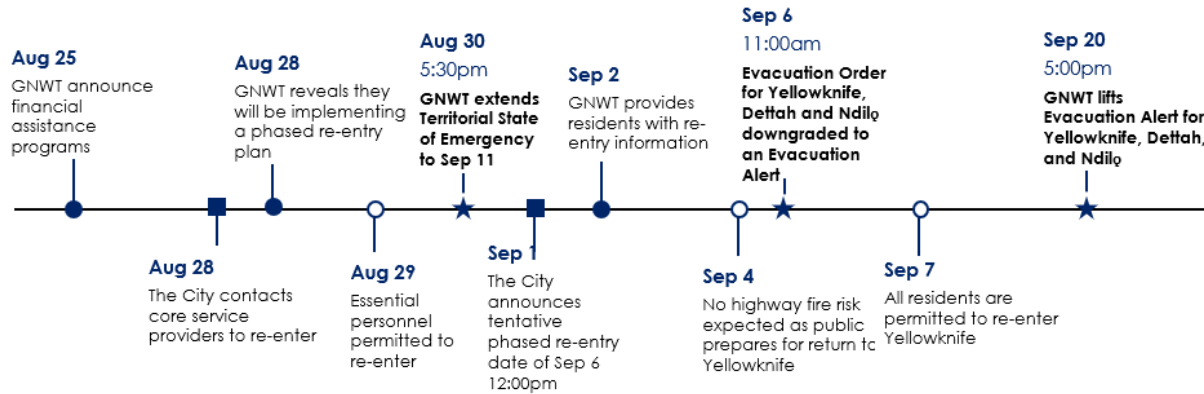
⁵⁴ Ibid.

⁵⁵ Ibid.

chemicals to prevent spread.⁵⁶ Prior to this, crews were unable to pursue direct attack due to the fire's intensity.

RECOVERY TIMELINE

As the wildfires became more manageable, the City transitioned into a Recovery phase. Key events in this phase included the release of financial assistance programs by the GNWT, as well as re-entry instructions for residents. This phase contains the downgrading of the Evacuation Orders to Evacuation Alerts, and their total lifting on September 20th.



On August 25, the GNWT introduced two new financial assistance programs to support evacuees and impacted businesses. An evacuation travel support program was designed to offer a one-time payment for vehicles that evacuated to a southern jurisdiction or other areas within the Northwest Territories. The second was a financial assistance program for businesses, established to alleviate operational costs caused by the wildfire evacuations.⁵⁷

The wildfire burning west of the city of Yellowknife was described as 'being held' on August 28.⁵⁸ Re-entry efforts began as Northwest Territories officials announced a five-phase plan for re-entry as follows: establishing that the community was safe, checking for damage and identifying critical services, critical service workers return, re-establishing basic services, and lastly, residents returning home.⁵⁹ As the wildfires became more controllable by August 29, the City initiated contact with critical service workers who were crucial to supporting the re-entry process. Priority was given to critical service workers, including those in grocery stores, gas stations and hospitals, to ensure a smooth transition for the returning community members.⁶⁰ Residents were reminded that an Evacuation Order remained in effect, and non-critical workers were advised to not return yet.

⁵⁶ Williams, Chloe. "How will the NWT's fires – and its evacuations – come to an end?" Cabin Radio, August 22, 2023. <https://cabinradio.ca/145103/news/yellowknife/how-will-the-nwts-fires-and-its-evacuations-come-to-an-end/>.

⁵⁷ Ziafati, Noushin. "Preparing for the worst, hoping for the best": Evacuation order issued in Hay River, N.W.T." CTV News, last updated August 26, 2023. <https://www.ctvnews.ca/canada/preparing-for-the-worst-hoping-for-the-best-evacuation-order-issued-in-hay-river-n-w-t-1.6534420>.

⁵⁸ Williams, Ollie. "Yellowknife fire now 'being held,' city to recall some critical staff." Cabin Radio, August 28, 2023. <https://cabinradio.ca/147479/news/yellowknife/yellowknife-fire-now-being-held-city-to-recall-some-critical-staff/>.

⁵⁹ CBC News. "N.W.T reveals phased return plan for wildfire evacuees as Yellowknife blaze 'being held'," August 28, 2023. <http://www.cbc.ca/news/canada/north/northwest-territories-wildfires-update-1.6949996>.

⁶⁰ The Canadian Press. "Northwest Territories starts plans to lift evacuation as wildfire battle sees shift," CP24, August 29, 2023. <https://www.cp24.com/news/northwest-territories-starts-plans-to-lift-evacuation-as-wildfire-battle-sees-shift-1.6538900?cache=yes&clipid10406200text%2Fhtml%3Bcharset%3Dutf-80404%2F7.258454%2F7.656680%2F7.478334>.

On August 30 at 5:30pm, the GNWT announced that the Territorial State of Emergency was extended until September 11, as high temperatures and winds were now anticipated.⁶¹ On September 1, the City and the Yellowknives Dene First Nation announced a tentative date of September 6 at 12:00pm for residents to begin returning to Dettah, Ndilq and the city of Yellowknife.⁶² On September 2, the GNWT released information to residents regarding re-entry. Information included: how to plan to travel home safely after the Evacuation Order is lifted, GNWT services available as of the re-entry date, risks and considerations, flight registration, supports available for those who had not yet returned home, and the limited services available in the city of Yellowknife.⁶³ By September 4, it was anticipated that wildfires were no longer expected to pose challenges along the highway route from Alberta up into the Northwest Territories, allowing critical workers to begin their journey back to the city of Yellowknife, Dettah, Ndilq and along the Ingraham Trail.⁶⁴

On September 6 at 11:00am, the Evacuation Orders for the city of Yellowknife, Dettah, Ndilq were downgraded to Evacuation Alerts, signaling that residents could start returning home.⁶⁵ The City provided updates on the status and schedules of services such as waste disposal, water services and solid waste facilities. On September 7, City staff were in the process of preparing for the reopening of facilities and resumption of program and services. Residents were advised that not all facilities would reopen at the same time and that some programs and services may not be immediately up and running.⁶⁶ A schedule outlining operating hours for services and facilities such as City Hall, the Public Library, the Visitor Information Centre, Community Arenas, and others, were shared to the public.

As residents continued to make their ways back home, the GNWT lifted the Evacuation Alerts for the city of Yellowknife, Dettah, and Ndilq on September 20 at 5:00pm.⁶⁷ However, it was emphasized that fire conditions could fluctuate rapidly and if required, an Evacuation Alert could be put back in place with short notice.

⁶¹ Government of the Northwest Territories. "NWT Emergency Response Update - August 30, 2023 5:30 PM," August 30, 2023, <https://www.gov.nt.ca/en/newsroom/nwt-emergency-response-update-august-30-2023-530-pm>.

⁶² Government of the Northwest Territories. "Shane Thompson responds to Yellowknife, Dettah and N'Dilo re-entry date," <https://www.gov.nt.ca/en/newsroom/shane-thompson-responds-yellowknife-dettah-and-ndilo-re-entry-date>.

⁶³ Government of the Northwest Territories. "Shane Thompson responds to Yellowknife, Dettah and N'Dilo re-entry date," <https://www.gov.nt.ca/en/newsroom/shane-thompson-responds-yellowknife-dettah-and-ndilo-re-entry-date>.

⁶⁴ CBC News. "N.W.T. wildfire update September 4, 2023," September 4, 2023, <http://www.cbc.ca/news/canada/north/nwt-wildfire-update-sept-4-2023-1.6956603>.

⁶⁵ City of Yellowknife. "Welcome Home – An Update on City Services," September 6, 2023, <https://www.yellowknife.ca/en/news/welcome-home-an-update-on-city-services.aspx>.

⁶⁶ City of Yellowknife. "City Resumes Programs and Services in Phases," September 7, 2023, <https://www.yellowknife.ca/en/news/city-resumes-programs-and-services-in-phases.aspx>.



⁶⁷ Government of the Northwest Territories. "NWT Emergency Response Update - September 20, 2023 5:00pm," September 20, 2023, <https://www.gov.nt.ca/en/newsroom/nwt-emergency-response-update-september-20-2023-500pm>.

Key Findings

The following section outlines key findings organized across the three phases of the wildfire emergency: 1) Mitigation and Preparedness, 2) Response, and 3) Recovery. Five major themes are highlighted across all phases of the emergency: Cross-Agency Coordination, Public Communications, Consideration for Vulnerable Populations, Emergency Operations Centre and Continuity Management, and Evacuation Planning, Response, and Recovery.

<p>Phase 1: Mitigation & Preparedness</p>	<p>The Mitigation & Preparedness Section of this report provides an overview of the findings of the City's mitigation and preparedness activities, including Key Strengths and Areas for Future Improvement. It examines the following themes: Cross-Agency Coordination; Public Communications; Considerations for Vulnerable Populations; the Emergency Operations Centre and Continuity Management; and Evacuation Planning, Response, and Recovery.</p>
<p>Phase 2: Response</p>	<p>The Response Section of this report provides key findings on the City's response activities, including Key Strengths and Areas for Future Improvement. It examines the following themes: Cross-Agency Coordination; Public Communications; Considerations for Vulnerable Populations; the Emergency Operations Centre and Continuity Management; and Evacuation Planning, Response, and Recovery.</p>
<p>Phase 3: Recovery</p>	<p>The Recovery Section of this report provides key findings for the City's recovery activities including Key Strengths and Areas for Future Improvement. It examines the following themes: Cross-Agency Coordination; Public Communications; Considerations for Vulnerable Populations; and Evacuation Planning, Response, and Recovery.</p>

Key findings for each of the three phases of this emergency event are separated into two categories, **Key Strengths** along with the entities associated or involved, and **Areas for Future Improvement** along with the associated responsible entities.

Representative Symbol	Category	Responsibility
	Key Strength	Entities involved
	Area for Future Improvement	Responsible entities









Phase 1: Mitigation & Preparedness

The Mitigation & Preparedness Section provides an overview of the findings of the City's mitigation and preparedness activities, including key strengths and areas for future improvement. It examines the following themes: Cross-Agency Coordination; Public Communications; Considerations for Vulnerable Populations; the Emergency Operations Centre and Continuity Management; and Evacuation Planning, Response, and Recovery.

CROSS-AGENCY COORDINATION

Disaster risk management should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment. Understanding risk is an important first step for planning and preparing for potential disasters.

In alignment with the Sendai Framework for Disaster Risk Reduction all-of-society approach, building resilience and promoting risk-informed decision-making are collective responsibilities. Therefore, cross-agency coordination is essential to effectively reduce risk. This includes participation of community organizations, local authorities, First Nations, provincial and territorial governments, and the federal government in advancing efforts relating to mitigation, preparedness, response, and recovery. Coordination of planning efforts, as well as joint exercising to validate decision-making processes, communication practices, and logistics management, can help improve multi-agency coordination and ensure a common understanding of different roles and responsibilities in disaster management.

Key Findings	Responsibility
 Considerable effort and resources were provided by contractors, volunteers, and City staff for the installation of firebreaks and sprinklers.	The City
 Interviews indicated the coordination and communication between the City and the GNWT ECC worked well throughout the wildfire season.	The City & the GNWT
 The City used the State of Local Emergency to re-allocate resources to mitigate risks of the 2023 North Slave Complex Wildfires.	The City
 A review of documentation indicated that in 2019 several of the recommendations from the 2012 Community Wildfire Protection Plan had not been completed.	The City & the GNWT
 FireSmarting, including the installation of fire breaks and sprinklers, was conducted during the response phase rather than the mitigation/preparedness phase.	The City
 The timing of the declaration of the State of Local Emergency may have led to delays in the acquisition of resources and equipment.	The City
 There was a lack of clarity in the interpretation of the <i>Emergency Management Act</i> , particularly once the Government of the Northwest Territories declared a territorial state of emergency and issued the Evacuation Order on August 16, 2023.	The City & the GNWT
 The City did not extensively coordinate with partner organizations on preparedness activities (e.g., planning workshops, emergency exercises, the development of planning documentation) in relation to complex emergency/evacuation scenarios.	The City

Risk Assessment and Community Wildfire Protection Plan

Conducting risk assessments and planning are both important measures to understand risk, take actions to prepare, and inform decision making during a wildfire event. A Yellowknife Community Wildfire Protection Plan (CWPP) was released by the GNWT in March 2012, and a review of this plan was conducted by the GNWT and the City in March 2019, with recommendations for updates. The CWPP lays out areas within the city that were determined to be at high risk during a fire situation. In April 2022, the City's Fire Division conducted a Community Risk Assessment, which addressed a range of fire-related hazard events. It identified the need for a Community Wildfire Preplan, which would include operational information, mapping of values at risk, and protection strategies and tactics for key aspects of interface firefighting.

Risk assessments were also conducted during the wildfire event of 2023. On August 4, 2023, the City requested that the ECC conduct a wildfire-specific risk assessment based on current conditions. This risk assessment helped inform decision-making at the City. However, although the City worked closely with ECC to better understand the wildfire risk, the wildfire information was not linked to specific zones that would trigger an Evacuation Notice or Alert for the City.

Risk Reduction: FireSmarting, Fire Breaks, and Sprinklers

Public records show that on August 8, 2023, the Yellowknife City Council approved the expenditure of funds on an emergency basis for wildfire mitigation/risk reduction within the municipal boundary. This approval initiated a series of risk reduction measures conducted by the City. Following this, considerable effort and resources were provided by City staff, contractors (with support from volunteers) to establish firebreaks and sprinklers in areas identified as having a particularly high risk of the impacts from wildfire.

To support risk reduction actions within the community, the City provided information to the public about emergency preparedness, FireSmarting personal property, and some updates on community protection activities being conducted by the City. Residents were urged by the City to FireSmart their own properties by clearing out any brush around their homes, and the city of Yellowknife's solid waste facility was opened for extended hours to accept any cuttings for disposal. The City also took measures to help communities manage smoke by providing free access to the Fieldhouse track and indoor playground, to encourage safe exercise for those at the greatest risk including children, elderly and at-risk populations.

Throughout the preparedness phase, and into the response phase, City and GNWT staff, military personnel, local contractors, and volunteers worked together building firebreaks and installing sprinkler systems to protect the city of Yellowknife from the approaching wildfire. The City worked with wildfire experts at ECC to understand the wildfire movement and climate conditions and to identify areas within the city of Yellowknife at highest risk. A network of sprinklers and water cannons were installed, connected by 20 km of hose and pipe on the west side of the city, pulling in 500-1,000 gallons of water per minute from local water sources. Trees were cut down to build a 100-metre firebreak around the Engle Business District, from Deh Cho Boulevard to the sand pits, and on Sewage Lagoon Road to Fiddler Lake. Fire retardant was also spread in vulnerable areas.

While these efforts were important for the protection of the city of Yellowknife, the delayed start in implementing these measures created challenges in sourcing equipment and implementing community protection measures with the impending threat of an approaching fire. The delayed

start of these actions also took valuable resources and focus away from other emergency response operations, such as preparing for a potential evacuation.

State of Local Emergency

An assessment of the sequencing of events suggested that the timing of the City's declaration of the State of Local Emergency (SOLE) led to some delays in acquisition of resources and equipment, as regular business operations were still prioritized over emergency response operations. Once the SOLE was declared, the City was able to reallocate contractors to prioritize response operations, as well as gain access to additional funding and equipment.

The Emergency Management Act and NWT Emergency Plan

The *Emergency Management Act* outlines duties and powers for local authorities, as well as the Minister and organization responsible for emergency management in the Northwest Territories. Provision 18(10) states that "If the Minister orders a declaration of state of emergency for an area that is already affected by a declaration of a state of local emergency, the declaration of a state of local emergency is deemed to be cancelled." Interviews with local City personnel suggested that once the GNWT declared a State of Emergency, the respective roles and responsibilities between the City and the Government of the Northwest Territories became unclear. This created challenges for coordinating evacuation efforts.

Coordination of preparedness activities with partners

Based on interviews held, it was revealed that prior to the 2023 wildfire season, the City had not participated in extensive planning workshops or joint exercises with partner organizations in relation to complex emergency scenarios such as a mass evacuation. Furthermore, the City and partners had not developed any shared planning documentation to address mass evacuation of the city.







PUBLIC COMMUNICATION

Public communication plays a crucial role in emergency preparedness within a community. One way that governments can support community members to enhance their own personal preparedness, is to provide them with knowledge and resources for how to prepare for a disaster. This includes disseminating information about potential threats to improve public understanding of the risk, such as the nature of the threat, its potential impact, and steps that individuals can take to protect themselves and their property. When resources and information are shared about an existing risk or potential emergency, it can encourage individuals and communities to take steps to prepare, such as creating emergency plans, assembling emergency supplies, and learning about emergency procedures.

Public communication also facilitates coordination among different stakeholders involved in emergency preparedness, including government agencies, non-governmental organizations, and the public. This coordination is critical for ensuring that all parties are working together effectively to prepare for and respond to emergencies.

Effective public communication before, during, and after emergencies can help to build trust between the public and the authorities involved in managing the events. This trust is crucial for ensuring public compliance with emergency measures and instructions. To support the public communication efforts during and following emergencies, preparedness activities can be completed such as developing template messages, pre-establishing connections with partner

organizations/agencies and their respective public information teams through emergency exercises, planning workshops, and developing plans and procedures for public communications during complex emergencies, including events resulting in evacuation.

Key Findings	Responsibility
 <p>The City provided some updates on measures being taken for community protection, including building firebreaks and installing sprinklers.</p>	The City
 <p>The lack of advanced and detailed updates about community protection and preparedness measures being taken by the City contributed to anxiety within the community.</p>	The City
 <p>Feedback from members of the public indicates a lack of accessible or widely communicated information regarding personal preparedness actions for individuals and families.</p>	The City & the GNWT
 <p>Public communications were not planned or coordinated between the City and the GNWT in advance of the 2023 North Slave Complex Wildfires.</p>	The City & the GNWT
 <p>Detailed information about plans to evacuate were not shared with the public in advance of the evacuation.</p>	The City & the GNWT
 <p>Many members of the public and stakeholders expressed a lack of overall confidence and trust in the preparedness of the City and the GNWT.</p>	The City & the GNWT

Public messaging on the City’s community protection and preparedness measures

The City directed the public to information about emergency preparedness on the GNWT and Federal Government websites through a media release on August 4, 2023. On August 5, 2023, the City provided information on proactive actions being taken by the City, including working closely with experts from the GNWT ECC to plan the installation of sprinklers and firebreaks on the west side of the city of Yellowknife. On August 8, 2023, the City shared an update on the commencement of FireSmarting activities, including expansion of firebreaks and removing sprinklers from community parks to be installed in the Kam Lake area. Another update on Deh Cho Boulevard being closed for FireSmarting was provided on August 14, 2023. On August 16, 2023, the City provided an overview of work that they were doing with contractors to construct firebreaks, actively remove vegetation “fuel” and establish sprinkler lines, providing details on where these measures were being installed.

Although the City provided these updates on actions being taken for risk reduction and community protection, interviews and feedback collected from the public indicated that the information was difficult to find and didn’t provide an overview of all the efforts being taken. This meant that many members of the public didn’t feel fully aware of what was being done to protect infrastructure within the city before or during the evacuation, which contributed to increased anxiety about potential impacts of the wildfire on homes and other community buildings.

Access to information on personal preparedness and wildfire risk

The PlaceSpeak survey conducted as part of this After-Action Assessment indicated that 71% of respondents reported having a moderate or lower level of understanding of wildfire risk prior to the 2023 wildfire season, as shown in Figure 3.

Many members of the public expressed that they had difficulty finding personal preparedness information shared by the City, including information on how to prepare for an evacuation, how to manage the impacts of smoke, and specific information related to preparedness for vulnerable populations. While others were able to access this FireSmarting information, they expressed that guidance was not provided early enough for people to take the recommended measures to ensure the safety of their homes. 68% of respondents to the PlaceSpeak survey ranked themselves and their families as having a low to moderate level of personal preparedness prior to the 2023 wildfire season. When asked to assess the extent of information received regarding wildfire risk and the preparedness activities that individuals and families can take, 80% of respondents indicated a very low to low level of information provided, shown in Figure 4. Only 15% of respondents indicated that they had high to very high confidence in what steps to take after the issuance of an Evacuation Alert. It was noted by respondents that more information about wildfire risk and details of the City or the GNWT's existing plans for evacuation both within and outside of the community would improve opportunities for personal preparedness.

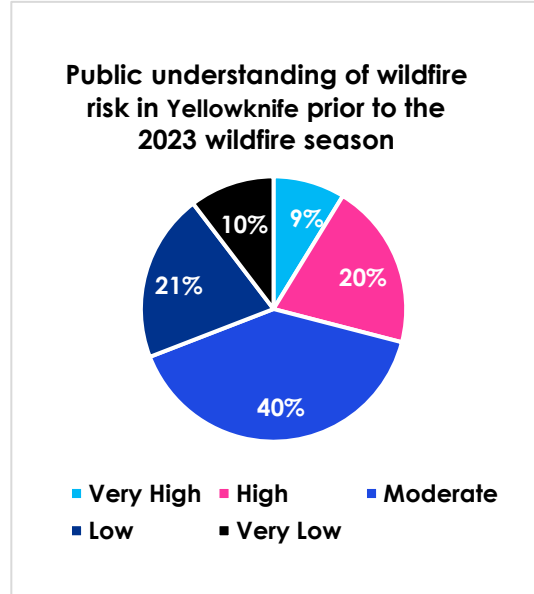


Figure 3: Public understanding of wildfire risk in Yellowknife prior to the 2023 wildfire season

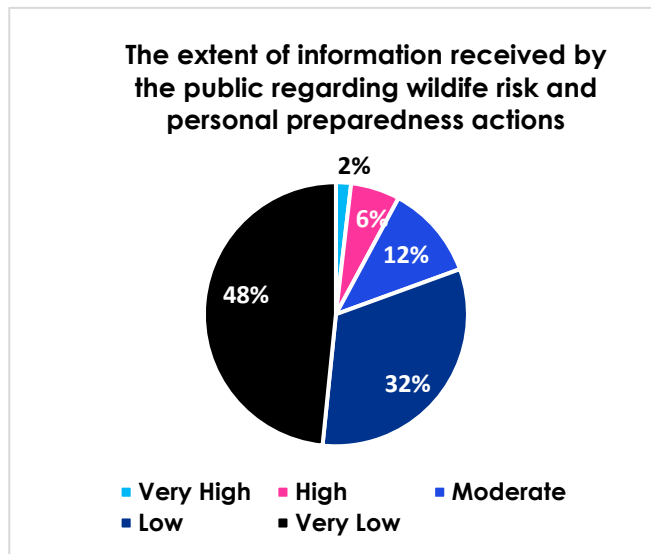


Figure 4: Extent of information received by the public regarding wildfire risk and personal preparedness actions

Public communication of evacuation plans

A major challenge expressed by community members through interviews and public engagement was the lack of clear and transparent communication to the public about the details of an evacuation plan. Many individuals had expected the City to implement a shelter-in-place plan (or a plan to evacuate within the community) as the primary response to the 2023 North Slave Complex Wildfires. Therefore, when discussions about a full evacuation began to spread across the city of Yellowknife, many members of the public wanted to see a clear evacuation plan issued from the City or the GNWT. Members of the public emphasized challenges in accessing clear messaging regarding the existence of an evacuation plan.

On July 26, 2023, the City shared an Evacuation Framework outlining some key considerations for an evacuation. On August 14, 2023, the City posted on Facebook that “Yellowknife is not currently under threat of wildfires. In the event that an evacuation was ever required for all or a portion of Yellowknife, the City would follow its evacuation framework”. However, many stakeholders and members of the public expressed that this framework did not contain the information they needed to prepare for evacuation. In particular, it didn't contain specific information regarding trigger points for an evacuation, information on where to go in the case of an evacuation, and how best to prepare. Although the City encouraged community members to be prepared, without the City or the GNWT sharing details of the evacuation plan and process, many community members faced confusion about how to make their own plans for evacuating.

Many people interviewed expressed that they would have rather heard from the City and the GNWT that there was no plan in place, than hear there was a plan and later find out that either there wasn't a plan in place or that the plan that existed wasn't sufficient. Stakeholders expressed that not knowing how much they could rely on government supports and coordination contributed to higher levels of stress and loss of trust in the government. Overall, 73% of respondents to the PlaceSpeak survey ranked the City's mitigation and preparedness for wildfires as very poor or poor.



Coordination of preparedness efforts specific to public communications

Interviews with City and GNWT staff suggested that in advance of the 2023 North Slave Complex Wildfires, governments involved in the response to the event did not engage in regular preparedness activities to support greater coordination during the response and recovery phases. This could have included organizing multi-agency emergency exercises with opportunities to test public communications procedures, the development and sharing of emergency public communications plans, and pre-developing messaging relating to various stages of a complex emergency/evacuation.

CONSIDERATIONS FOR VULNERABLE POPULATIONS

Special considerations are needed for community members that have specific needs or vulnerabilities in planning and preparing for an emergency. This may include people with disabilities, including people with mobility, speech, or developmental challenges, as well as those who are blind, deaf, hard of hearing, or who experience non-visible disabilities. It may also include seniors and Indigenous Elders, children and youth, and people with language barriers or who don't speak the dominant language of communications. Other population groups may include people with specific health concerns and requirements, those who struggle with mental

health and addictions, unhoused persons, tourists with limited local networks, low-income individuals and families, and people with safety concerns, such as survivors of abuse, gender-based violence, trauma, and people with Protection Orders. Furthermore, leading practices utilize a Gender-Based Analysis Plus (GBA+) ⁶⁸, an analytical tool that considers how diverse groups of people may experience government programs, plans, and policies differently. GBA+ highlights the need for an intersectional approach that accounts for a range of factors, such as sex, gender, identity, race/ethnicity, age, education, sexuality, language, race, ability, class, etc. Integration of a GBA+ approach in emergency management can contribute to better understanding of the unique needs and experiences of diverse populations in emergency situations, as well as the barriers they may face for enhancing preparedness and maintaining safety.

Key Findings	Responsibility
 Organizations supporting vulnerable populations are key sources of expertise for how to enhance preparedness to ensure all unique needs are met.	Vulnerable population organizations
 Preparedness and planning efforts did not adequately address the unique needs of vulnerable populations.	The City & the GNWT

Unique needs of vulnerable populations

As part of this assessment, many stakeholders interviewed raised issues with the lack of preparedness support tailored to the specific needs of vulnerable populations. For populations with specific requirements, it may be more difficult to respond quickly to an emergency event or evacuation, without adequate time to prepare. While some people move more slowly, others have specific life-support or health equipment that needs to be brought with them. People who rely on medication or have chronic illness may also need additional time to fill their prescriptions or ensure they have the food or supplies needed to maintain their health and wellbeing during an evacuation. In other cases, when individuals or families have limited financial resources, they may not be able to make quick arrangements to access transportation or accommodations without financial supports being in place.

Several community members with specific needs shared through interviews and public engagement that they did not feel as though their unique requirements were considered as part of the GNWT or the City's preparedness and planning and expressed a lack of information shared on how to prepare themselves for an evacuation. Some articulated how they were afraid that that they would not be provided with transportation and would therefore be left behind. Others could not fully understand information about preparedness and risk being shared due to language barriers.

Several of the organizations that support vulnerable populations shared in interviews that they also didn't feel prepared to coordinate the evacuation of the populations they serve. Most of the organizations interviewed said that they had never been included in any preparedness or planning activities with the City or the GNWT. While some organizations had emergency plans in place, very few had considerations for the evacuation of clients beyond the limits of their facility,

⁶⁸ Government of Canada. "Gender-based Analysis Plus (GBA+)". <https://www.canada.ca/en/women-gender-equality/gender-based-analysis-plus.html>

let alone a city-wide evacuation. The challenges these organizations reported included a lack of arrangements for transportation, registration and tracking systems for vulnerable populations, communications, and accommodation considerations. Not only were organizations not fully prepared to support their clients in evacuation, but they also didn't have plans in place to support their own employees. In the time leading up to the evacuation, organizations reported not having the information being requested by their employees about what to do if an evacuation were to occur, which increased stress and uncertainty among staff.

EMERGENCY OPERATIONS CENTRE AND CONTINUITY MANAGEMENT

Training and Exercises

Training programs assist local authorities to prevent and prepare for the impacts of an emergency and enhance understanding of core emergency management concepts and structures such as the Incident Command System (ICS) (see Appendix D for details on the ICS). Training is crucial for fostering a shared understanding and common terminology in emergency response, and to ensure all necessary duties within an Emergency Operations Centre (EOC) are effectively filled. Specific to evacuation preparedness, training of staff ensures a basic understanding of each stage of mass evacuation and knowledge for responding to different types of incidents.

Emergency management exercise programs are also critical for ongoing enhancement and quality assurance. These simulated emergency management programs:






- Encourage the use of training in a simulated event scenario and foster crucial relationships before an actual emergency.
- Highlight areas of skills or capabilities that need improvement.
- Evaluate decision-making procedures under complicated and stressful circumstances.
- Identify gaps and determine the need for additional resources.

These exercises also provide the opportunity to practice new or revised standard operating procedures with an emphasis on the development of shared situational awareness and a common operating picture. Exercises validate different interrelated elements of an emergency response plan to confirm functionality and interoperability of systems. The documented results of an exercise are then used to identify plan gaps and limitations and improve and revise the plans to address any deficiencies. In the context of preparing for mass evacuation, exercises can train staff to respond to different scenarios. They can also test public communication practices, multi-agency coordination, support for vulnerable populations, coordination of transportation of evacuees, establishment of evacuation routes, and identification of shelters and vendors of necessary supplies.

Business continuity management

Business continuity management refers to activities performed by an organization to ensure that critical business functions will be available to stakeholders and the public should a disruption occur. It is important that Business Continuity Plans (BCPs) are based on hazard identification, risk assessment, and impact analysis. They should highlight the need to identify critical activities, assets, functions, and processes, and to evaluate the potential impacts from their disruption. This

includes determining the minimum resources necessary to continue operations and to regularly review strategies and plans to incorporate new relevant information and corrective changes. It should also include planning for the recovery of operations once a disruption is complete and operations are returning to normal.

Key Findings	Responsibility
 Despite gaps in ICS or EOC training, City staff were able to activate a functional EOC and carry out the basic functions required.	The City
 City staff took initiative and contributed significant effort to supporting continuity of business operations during the emergency event.	The City
 The lack of prior ICS training and exercises for City staff contributed to delays in the EOC becoming fully functional and in the fulfillment of each role.	The City
 The City does not have a business continuity management program.	The City
 Lack of business continuity planning documentation and practices increased the risk of disruptions to critical City operations during the activation of the City's EOC and evacuation of City staff.	The City

Training and exercise

Prior to the 2023 wildfire season, the City lacked a comprehensive Training and Exercise Plan for emergency response. Moreover, many staff members who were mobilized in the City's EOC had not previously been trained in the ICS or familiarized with EOC operations. In addition, the City had not recently conducted a full emergency response exercise.

Despite managing to activate a functional EOC, the absence of clear role definitions and responsibilities hindered City staff from fully carrying out the standard practices and requirements of their respective roles. The lack of prior training and exercises potentially contributed to delays in the City EOC becoming fully functional and in the fulfillment of each role. Consequently, the City EOC faced difficulties in effectively coordinating response efforts during the wildfire response.

Many City staff interviewed highlighted the need for more intensive training in ICS, ranging from ICS 100 for EOC general staff to ICS 300 and 400 for those expected to assume management and leadership roles during emergencies. Although there has been some participation in emergency management training, stakeholders observed that not all leadership roles have undergone comprehensive training.

Business continuity management

The absence of BCPs across all necessary departments at the City contributed to significant disruptions in its operational and business processes leading up to and during the evacuation. Both a lack of clarity of roles and responsibilities, and identification of critical services and staff that should stay in the City of Yellowknife to support response efforts, meant that the City faced



issues in the continuity of services including finance, information technology (IT), administration, and other critical services.

As shared interviews, following the issuance of the Evacuation Order, many City staff evacuated from the City of Yellowknife along with other residents, while others remained in the City throughout the evacuation to maintain critical functions and infrastructure. While some staff were able to support response and business continuity by working remotely, other staff evacuated without their laptops and were unable to support remotely. In some cases, a lack of redundancy in critical service functions resulted in City staff being asked to return to the City of Yellowknife after they had evacuated. The lack of redundancy in key roles resulted in many City staff working very long hours, often for more than 12 hours a day. The City also faced challenges with its IT infrastructure, including limits on remote access and limited backup for data management and storage. This was raised as a concern during the evacuation due to the potential loss of data if the wildfire were to impact City Hall.


Despite the lack of BCPs, City staff took initiative to support continuity of business operations. An example of this was the effort to move data to the cloud as a backup through short-term arrangements with an online storage provider. Another example included the development of lists of critical services and the recalling of staff required to support emergency response.

EVACUATION PLANNING, RESPONSE, AND RECOVERY

Effective emergency planning is important to save human life and reduce suffering, by enhancing the delivery of effective response efforts. Emergency planning includes the development and documentation of a single or multiple coordinated plans to address the management of a crisis. Leading practices indicate that planning should occur regularly and particularly when a situation has changed that puts the existing plan(s) into question. Planning for an evacuation should also be considered during the preparedness phase of emergency management. Evacuation planning requires identifying the human and technical resources needed in both the evacuation area and the areas that could receive evacuees. It also includes preparing the public for mass evacuation, identifying, and assessing high risk areas, clear protocols for making the evacuation decision, processes for public warning, planning for evacuee movement, assessing sheltering requirements, and continuous evaluation and improvement.

Key Findings

Responsibility

 <p>The City's emergency plan and preparedness efforts prior to the 2023 North Slave Complex Wildfires did not include a detailed plan to support the mass evacuation of the City due to wildfires.</p>	<p>The City</p>
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Evacuation Planning and Coordination of Preparedness Efforts

Leading up to the 2023 North Slave Complex Wildfires, there was not a detailed plan in place for the evacuation of the entire city of Yellowknife. Interviews with City staff indicated that the City's plan to manage the potential risk of wildfire reaching the community was to relocate evacuees to sheltering locations established within the city (referred to by the City as a shelter-in-place plan). This included plans for some evacuees to shelter at the Multiplex Arena, and other residents located within risk areas of the community to be relocated temporarily to other parts of the city. In the time leading up to the GNWT's issuance of the Evacuation Order on August 16,



the City conducted planning activities to support this partial evacuation within the community. This included preparing to set up the Multiplex Arena as an evacuation centre, identifying alternate locations for people with recreational vehicles (RVs), and planning for the relocation and sheltering of animals and pets within the city. Although on July 26, 2023, the City shared an Emergency Evacuation Framework outlining some key considerations for an evacuation, this framework did not contain adequate detail to support the mass evacuation of the entire city population.





Phase 2:

Response

The Response Section provides key findings on the City's response activities, including key strengths and areas for future improvement. It examines the following themes: Cross-Agency Coordination; Public Communications; Considerations for Vulnerable Populations; the Emergency Operations Centre and Continuity Management; and Evacuation Planning, Response, and Recovery.

CROSS-AGENCY COORDINATION

Emergency Management is a shared responsibility that begins with individual community members and organizations, and is escalated to Local Authorities, First Nations, regions, territorial governments, and the federal government as required. Therefore, coordination between different governments and stakeholders is critical for effective emergency mitigation, preparedness, response, and recovery.

Key Findings	Responsibility
 <p>Integration of representatives of the Yellowknives Dene First Nation (YKDFN) into the City EOC contributed to excellent coordination of response efforts and communications.</p>	The City & YKDFN
 <p>Lack of shared understanding of roles and responsibilities and communication protocols between the City and the GNWT contributed to significant challenges for the coordination of response efforts.</p>	The City & the GNWT
 <p>There were significant challenges in establishing consistent liaison between the City and the GNWT during the response phase.</p>	The City & the GNWT
 <p>Challenges in coordinating the designation of critical service workers created some confusion for workers about whether to remain or evacuate.</p>	The City & the GNWT

Coordination between the City and Yellowknives Dene First Nation (YKDFN)

Staff representatives from YKDFN noted in interviews that they were not aware of having received advanced notice from the GNWT in the days leading up to the issuance of the Evacuation Order. However, they did note how the City proactively reached out to them to advise them of the GNWT's plan to issue an Evacuation Order and invited them to integrate into the City's EOC. The City provided their representatives with direct information, an office space, and food while working in the City EOC. The integration of YKDFN in the City's EOC significantly enhanced joint decision-making, planning, coordination, and issuing of joint communications. A staff representative of YKDFN expressed that "the reason that we were at all successful at managing the evacuation of YKDFN in Yellowknife, was because of the City, who brought in the YKDFN early".

Coordination between the City and the GNWT

The standard coordination structure for emergency management in the Northwest Territories is for the local emergency management organization (LEMO) to coordinate with the respective Regional Emergency Measures Office (REMO). Each activated REMO will then coordinate with the Territorial Emergency Management Organization if/when it has activated to support the REMO(s). In addition to coordinating with one another, the REMO and TEMO also serve as coordinating bodies for GNWT ministries involved in the emergency.

The City's EOC served as the LEMO for the City and would generally coordinate with the North Slave REMO if/when the REMO activates. However, the North Slave REMO did not activate to the level anticipated by the City during the days prior to the Evacuation Order on August 16th, which led to a change in coordination structure where the City coordinated directly with the

TEMO. This new coordination structure presented challenges during the peak response phase. Interviews and documentation indicated that there were opportunities for more consistent and productive communication between the City's EOC and the GNWT REMO/TEMO immediately prior to, during, and immediately following the August 16 Evacuation Order. These challenges and opportunities extended to the coordination between the City and certain GNWT ministries that were involved in the response effort.

Ambiguity regarding different roles and responsibilities between the two governments also contributed to poor coordination of public communications between the City and the GNWT, particularly due to the absence of pre-established processes for information sharing and coordination. Throughout the wildfire response, there were different understandings of which organization was responsible for coordinating response efforts and communicating these actions to the public. Furthermore, when decisions were made, they weren't always communicated effectively to all partners involved. There was no establishment of a Joint Information Centre through which partners could coordinate communication efforts and ensure alignment of messaging. City staff shared that in many cases, they would hear about information regarding the evacuation through public releases, at the same time as the rest of the public. Lack of advanced notification and coordination of information and public updates created challenges for City staff in preparing public communications in alignment with the GNWT information. At times it also resulted in challenges in responding to media and public enquiries, as City staff weren't provided with any additional information other than what the GNWT provided to the public.

Interviews with government staff also indicated that there were challenges in coordinating the phased evacuation process between the City and the GNWT due to different understandings of roles and responsibilities for arranging evacuation logistics. This included the organization of transportation within the city, to gathering points for flights arranged by the GNWT. While some logistics efforts were duplicated, there were also some gaps in supports provided for community members to support their evacuation.

Designation of critical service workers

There was a lack of clarity in identifying the critical services that should remain operational during the evacuation. This was partly because there wasn't an established process for determining critical services staff that needed to remain within the city of Yellowknife, and partly due to challenges in coordination between the City and the GNWT. Both government organizations had different approaches to establishing a list of critical services, which were misaligned due to a lack of shared understanding of jurisdiction and roles. This led to confusion amongst critical service staff about whether they should remain in the city of Yellowknife or evacuate with the general population. Some critical services such as grocery stores and pharmacies, were unsure whether they were considered critical and whether they had authorization to stay and continue to provide services. This meant that some self-identified critical service workers were concerned about the potential legal ramifications of staying in the city. These critical services also reported challenges in getting regular information from the City and the GNWT in support of their continued operation, including how critical service workers would evacuate if the wildfire entered the city of Yellowknife. Because of the overall lack of clear designation of critical service workers, staff across various agencies and organizations left the city of Yellowknife along with the general population, and it wasn't until their employers

were identified as critical that the staff were asked to return. For several days after the initial evacuation, interviewees who remained in the city to support emergency response noted some significant gaps in the services available.

PUBLIC COMMUNICATIONS

Clear, accurate, and timely communications to the public are critical for effective disaster response, particularly during a community-wide evacuation. Leading practices recommend that emergency response organizations develop a communications and warning strategy designed to address the needs for communication before, during, and after incidents. This strategy is crucial in ensuring that all relevant parties are well-informed and prepared to respond appropriately to any situation that may arise. The strategy should be informed by an assessment of the different communications needs in the community. The establishment of communication systems should address the need for redundancy, interoperability, and security of communication systems, so that communications can be provided in various risk scenarios.

Key Findings	Responsibility
 Regular updates were provided through press conferences livestreamed by the City on their website and by the City Mayor on Facebook.	The City & the GNWT
 Joint communications were developed and released by the City and YKDFN.	The City & YKDFN
 The lack of coordinated, clear, and detailed communications from the City and the GNWT contributed to significant confusion and stress within the community.	The City & the GNWT

City public communications

During the evacuation, the City provided information on the wildfire response by updating their website, live webcasts of press conferences, regular updates by the City Mayor, Facebook posts, and updates during media briefings. The City identified the need for live webcasting of GNWT updates, and therefore began to share livestream these updates via their website. Some stakeholders indicated in interviews that the Mayor played an important role throughout the evacuation as the City's representative to provide regular updates to the public from within the city of Yellowknife.

City and YKDFN public communications

Interviews indicated that communications between the City and YKDFN were coordinated well during the evacuation process. By integrating representatives from YKDFN into the City EOC, the City and YKDFN were able to coordinate and deliver joint public communications to residents of the city, Ndilo, and Dettah.

City and GNWT public communications

A major theme of the evacuation process was the lack of coordinated public communications between the City and the GNWT. According to the Northwest Territories (NWT) Emergency Plan that was publicly available in 2023, there is a shared responsibility between the Local Authority and the GNWT to provide updated information to the public during an evacuation. Stakeholders

expressed confusion about the deficiency of consistent communications from the City and the GNWT. For instance, some pieces of information would be provided by one government body while conflicting information would be provided elsewhere, making it difficult to know where to get updated information. Stakeholders and members of the public reported confusion about who was in charge during the evacuation and who to contact for support. The lack of coordinated public communications between the City and the GNWT during the evacuation of the city of Yellowknife resulted in an erosion of public trust in both governments. 70% of respondents to the PlaceSpeak survey indicated a very low or low rating of the extent and effectiveness of information received regarding the evacuation, procedures, and access to services.

Feedback from stakeholders and the public revealed particular confusion regarding the Evacuation Order issued by the GNWT on August 16, 2023. Some individuals reported being aware of the Order before its official announcement, including GNWT employees and individuals with connections to the RCMP. Some said they heard about the Order in advance directly from staff at the GNWT. This meant that some people were already evacuating before the Order was made public. 41% of PlaceSpeak survey respondents indicated that they first heard about the Evacuation Order through personal contacts or word of mouth. Only 15% of respondents indicated they heard about the Evacuation Order from the City or the GNWT.

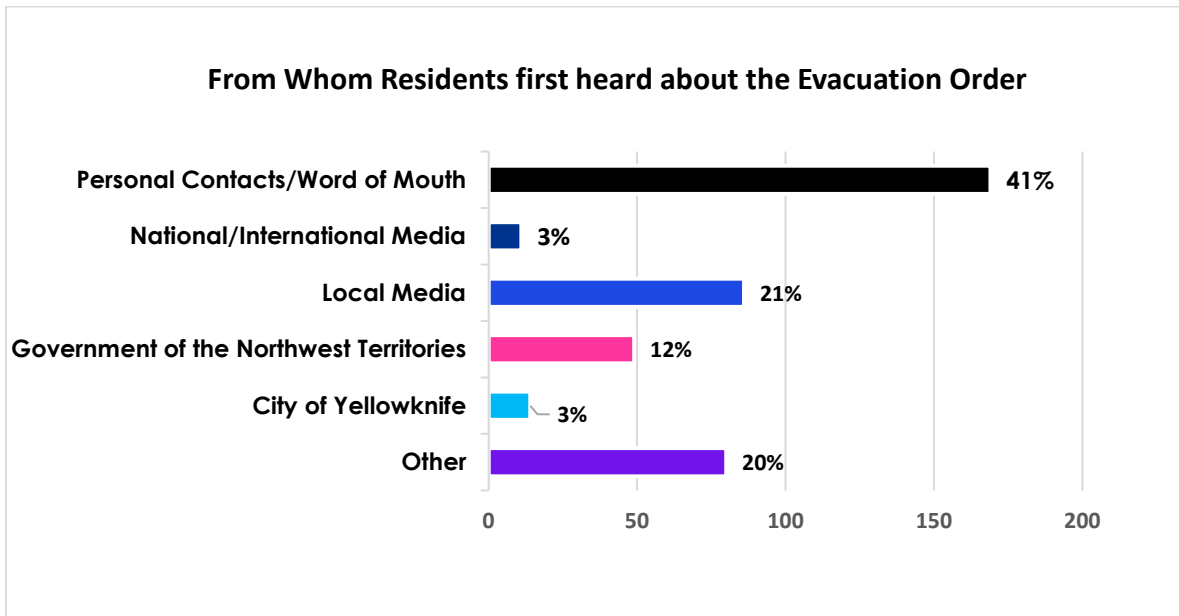


Figure 5: From Whom residents first heard about the Evacuation Order

Clarity and detail of public communications

Members of the public indicated that although the City and the GNWT provided some public updates, they didn't provide the type of detailed information that the public was seeking, leading many to look to local media outlets as main sources of information. Many expressed frustration that the press conferences provided updates but didn't answer the specific logistical questions they were looking for, including specific information to help the public understand the wildfire risk, updates on the specific actions being taken by the City and the GNWT, and information on what supports were available. Members of local media also expressed their

frustration with asking questions in press conferences and not receiving direct answers. Local media noted that press conferences that included experts, rather than political representatives, were most effective for answering questions being asked by the public. Some media outlets had daily meetings with the City Mayor or direct contacts at the City or the GNWT, while others relied on different sources of information. Media representatives also experienced barriers from not having a direct person at the City to whom they could address questions. However, many appreciated having nightly press conferences.

Through the PlaceSpeak survey, only 4% of respondents indicated that they had information about emergency support services being offered following the issuance of the Evacuation Order. Similarly, only 2% of respondents had access to information about mental health services and 4% had access to information about services or considerations for pets and animals. Among respondents, 42% had access to information about the status of the wildfire, 31% were informed about appropriate evacuation routes, and 12% knew about potential evacuation destinations.

Some stakeholders expressed how they would have benefited from hearing an estimate of how long they would be away from the city. Many stakeholders and members of the public expressed that they would have preferred to hear from the City and the GNWT that they weren't sure how long the evacuation would be for, rather than hearing nothing at all about what to expect. Even if the length of time would be extended, they felt it would be helpful to hear that they should prepare to be away for at least 2 weeks. Others expressed frustration that information about how to prepare to evacuate (like packing lists, what non-essential electrical applications to turn off, sprinkler use, and other information) was not provided until after many people had already evacuated. Some community members expressed gratitude for occasions when City staff or contractors shared photos and other updates on the work of building firebreaks but noted that they would have appreciated more formal updates from the City.





The types of information that stakeholders found to be lacking in detail or clarity included:

- Status and risk of the wildfire throughout the evacuation process;
- Evacuation routes, destinations, and the condition of the evacuation route;
- Clear schedule for evacuation;
- Information about support on the highway if a vehicle broke down;
- Status of commercial flights and taxi services;
- Guidelines for how to shut down houses for an extended period;
- Support for people outside the Northwest Territories on vacation;
- Information about emergency support services, including mental health support and services for pets/animals;
- The personal liability, legality, and impacts of not evacuating;
- Roles of employees in industries such as public health; and
- Updates on what measures were being taken in the City to protect infrastructure and homes while community members were evacuated.

CONSIDERATIONS FOR VULNERABLE POPULATIONS

Special considerations are needed for community members that have specific needs or vulnerabilities to ensure their wellbeing during evacuation. They may experience the evacuation differently than the general public, and many may encounter additional barriers and/or

disproportionate impacts of the evacuation process. The Sendai Framework for Disaster Risk Reduction emphasizes how disaster management requires inclusive, accessible, and non-discriminatory participation, and paying special attention to people disproportionately affected by disasters. A perspective that considers gender, age, disability, and culture should be integrated in all policies and practices.

Key Findings	Responsibility
 Organizations supporting vulnerable populations made substantial contributions in assisting their clients during the evacuation process.	Vulnerable population organizations
 Vulnerable populations with specific needs faced additional challenges during the evacuation process.	The City & the GNWT
 There was not a full understanding of the vulnerabilities and needs of unique populations during response and re-entry.	The City & the GNWT
 Measures were not put in place to ensure the safety of vulnerable individuals during the evacuation and re-entry to the city of Yellowknife.	The City & the GNWT

Challenges for vulnerable populations

The sudden need to evacuate the city of Yellowknife contributed to panic and stress across the community, but particularly for vulnerable populations that required extra time to prepare for evacuation. Many had no plans in place for how or where to evacuate. This meant that many people couldn't fill necessary prescriptions before leaving, and many encountered challenges in arranging accessible transportation and accommodation.

Another concern raised was the lack of mental and physical health support throughout the evacuation process. Evacuation procedures, transportation, and accommodations were often not equipped to cater to those with specific health needs or disabilities. People struggled with a lack of access to routine medical care, medications, and dietary specificities, which led to negative health impacts. The trauma of these events was particularly heightened for individuals with disabilities. Across almost all vulnerable population organizations interviewed, there was consistent emphasis on the need for support workers to be evacuated with the vulnerable people they serve. This included ensuring that people with similar needs were evacuated together, with proper support people, to evacuation centres with appropriate supports in place.

Transportation concerns for vulnerable populations were also raised. Many experienced barriers when trying to access buses and planes. Uncertainty prevailed over the availability of buses and other methods of transportation to get to the point of departure for GNWT organized flights. Many evacuees experienced long waiting lines for flights without prioritized boarding for Elders, seniors, families with young children, and people with disabilities or other physical limitations. Some waited in lines all day only to be turned away due to lack of space on the planes and were told to come back the next day. Lack of seating, food, or water while waiting for hours in these lines was also a significant challenge. Some people using wheelchairs described the undignifying experience of being lifted into planes due to lack of accessible ramps. For those

evacuating by road, the limited fuel and washroom stops along the highway was noted as a significant barrier to safe evacuation. For people with physical challenges, this long journey without access to washroom facilities was extremely challenging. Many people in evacuation centres also faced issues with transportation between the centre and their accommodations, which made it difficult to access the meals provided at the centres.

Through interviews, the PlaceSpeak survey, and the public engagement session, many people shared the challenges they faced in the evacuation centres established in other communities. This included challenges due to inadequate systems for prioritizing the provision of services or resources for the most vulnerable populations to ensure they received the support they needed. The shelters were often not fully accessible or adequately equipped. There were issues with bathrooms, personal hygiene facilities, and the availability of cots and supplies. Additionally, there was a lack of access to necessary medications, posing a risk for those with medical needs. In many cases, dietary needs were not met, which may have led to health issues. For some, since the accommodations failed to address their needs, they arranged their own accommodations, which added extra financial hardship.

Staff working for organizations that support vulnerable populations also noted significant concerns regarding the places where some people were evacuated. There were many instances where individuals with addictions were sent to city of Yellowknife centres featuring easy access to illicit substances and alcohol. This led to high numbers of relapses, with long term consequences for addiction recovery. It was noted that consideration is needed for where these populations are relocated to, in order to reduce harm. For example, some people may benefit from being relocated to more remote areas, where substance access is lower. In other situations, concerns were raised about domestic or gender-based violence occurring in hotel rooms in host communities, and lack of support services to provide aide.

Interviews with stakeholders raised the need for considerations to ensure safe and culturally appropriate evacuation measures for First Nation Elders. Elders who had never left their community for extended periods before struggled when not evacuated with other members of their community. Elders who do not speak English or French faced barriers due to lack of public communications in local Indigenous languages. Elders with particular health needs were not prioritized for access to transportation, and therefore had to wait in lines for hours before boarding planes.

From an accessibility perspective, it was also noted that throughout the evacuation process, communications were not always provided in accessible formats. This includes lack of sign language interpretation, closed captioning, images, or translation into multiple languages. This created a barrier for many people in the community in getting updates on what was happening during the evacuation.

Feedback from the public and organizations that support vulnerable populations indicated a need to ensure the safety of vulnerable populations such as unhoused persons, seniors, or people with disabilities, during the evacuation and return to the city of Yellowknife. They suggest this could include a system for registering vulnerable populations to ensure the ability to contact these individuals as needed.

Challenges for organizations supporting vulnerable populations

Non-governmental organizations that support vulnerable people shared in interviews that they did not receive any advanced notice from the GNWT about the possibility of an evacuation. Many expressed dismay that there was no identified contact person at either governmental level with which they could discuss options to support vulnerable populations. Feedback from organizations that support vulnerable populations, as well as feedback from the public, unanimously stated that more advanced notice of an Evacuation Order was needed to properly prepare to leave. Organizations themselves were also not prepared to support the evacuation of their clients, and many didn't have evacuation plans that extended beyond their facility limits. This left organizations with insufficient time to prepare to support their clients with arrangement of transportation, tracking systems, communications, and accommodation considerations.

There were also many challenges for staff that needed to balance supporting their own families, as well as their clients. In many cases, staff evacuated quickly with their families, and very few remained to support the evacuation of clients. Due to limited advance notice of the Evacuation Order, many organizations did not have plans in place for how to manage staff availability and capacity to support evacuation efforts. Some said they were relying on the City to have a detailed plan in place to support vulnerable populations, and therefore did not have plans in place themselves. Heads of organizations reported not having sufficient information related to the Evacuation Order to pass on to their staff, which increased stress and uncertainty.

Many stakeholders noted that there was no clear contact person at the City or the GNWT for organizations supporting vulnerable populations to reach out to. They also noted limited communications with both levels of government at all stages of evacuation. Because of a lack of joint advanced planning and direct communications with the City, it was often unclear to organizations what resources the City or the GNWT would provide to vulnerable populations, and what resources organizations were expected to provide independently to support their clients. This contributed to confusion, lack of coordinated efforts and additional stress for staff and clients.






EMERGENCY OPERATIONS CENTRE AND CONTINUITY MANAGEMENT

Leading practices for organizations in disaster response are to establish an incident management system to direct, control, and coordinate response, continuity, and recovery activities. The organization shall assign a specific organizational hierarchy, roles, and responsibilities for each incident management function.

Local authority EOCs may not always have the capacity to manage all elements of an emergency scenario. In the Northwest Territories emergency management system, while the local authority is the first level of response coordination, higher levels of government can provide assistance to emergency response operations as needed. To enhance capacity management and requests for assistance, leading practices recommend that organizations implement resource management procedures to guarantee the provision of sufficient human, physical, financial, and information resources. This includes the implementation of mutual aid, mutual assistance, reciprocal, and/or service level agreements as necessary.

In some cases, there are members of the community that want to support emergency response as a volunteer. Leading practices for volunteer management indicate that if a local authority determines there is a role for volunteers in supporting emergency management activities, then

volunteer management plans should be developed to ensure the effective management of registered volunteers as well as spontaneous volunteers. This requires the establishment of a system to register volunteers before a disaster event, either through a system managed by the local authority, or through organizations that manage their own volunteers.

Key Findings	Responsibility
 The City identified the appropriate staff to fill key operational roles in the EOC throughout the evacuation.	The City
 Volunteers contributed significant time, effort, and resources to support the implementation of community protection measures.	Volunteers
 The welfare of City staff was not fully contemplated during the initial activation of the EOC.	The City
 Documentation processes were not appropriately managed during the initial activation of the EOC.	The City
 Absence of a volunteer management coordinator or strategy led to lack of City oversight and created liability and safety concerns.	The City

City EOC Activation and Roles and Responsibilities

City staff shared in interviews that the EOC was activated to Level 1 (partial activation) on July 24, 2023. However, this wasn't a formal activation and was focused on providing support to evacuees from Behchokò. Most staff were still upholding their regular work responsibilities. On August 14, the City's EOC was activated to Level 3 (full activation) and staff started to more comprehensively carry out EOC functions.

After the full activation of the City's EOC, the City identified appropriate staff to fill some key operational roles. However, due to lack of prior ICS training, there wasn't clarity within the City EOC of the different roles and responsibilities for each position, or regarding the overall flow and operations of the EOC. Lack of understanding of specified roles and functions meant that many staff took the approach of identifying gaps and responding to them directly. This approach created some challenges as some key operations were missed while other activities weren't being delegated to the appropriate roles. In several cases, key City staff evacuated along with the general population, leaving a lack of expertise and redundancy of roles in the City EOC. This led to limited capacity, with some staff taking on multiple roles, and other roles remaining unfilled. Although there were some role checklists, these were underused due to lack of awareness of their existence. Outside of the City EOC, there was also a lack of clarity amongst City Councilors regarding their roles in an evacuation, indicating a need for better role definition and communication.

Recognizing the lack of capacity within the City EOC, the City put out a request for assistance to the GNWT for support for the City's Incident Command System team. Based on information shared in interviews, on August 18, 10 Canada Task Force 2 (CAN-TF2) emergency management personnel were sent to the City. CAN-TF2 is a division of the Calgary Emergency Management



Agency which comprises of an all-hazards disaster response team with incident management capabilities to respond to emergencies and disasters throughout Canada. Upon arrival, the CAN-TF2 team provided support to the City EOC staff to help them better understand their individual roles and to enhance overall coordination. With the support of CAN-TF2, the City EOC enhanced its overall functionality by improving documentation processes, enhancing communications and partner coordination, including consideration for staff wellbeing, increasing situational awareness, and more adherence to the established chain of command.

Staff Welfare in the EOC

One of the challenges within the City EOC was establishing supports for staff, many of whom were working long days under stressful conditions, with lack of opportunities for staff turnover and breaks. This was in part due to the lack of business continuity planning by the City and identification of the staff needed to stay in the city to operate the City's EOC. Furthermore, during the initial activation of the City EOC, there was no one assigned to a Safety Officer role within the EOC to monitor incident operations and ensure operational safety, including the health and safety of first responders. Lack of safety oversight resulted in delays in providing food and ensuring safety considerations for City EOC staff.

Documentation processes

Proper documentation and information management approaches were not sufficiently implemented in the City EOC, particularly at the beginning stages of activation. For example, it wasn't until Canada Task Force 2 (CAN-TF2) arrived that the City's EOC started to develop daily Situation Reports. Documentation of financial expenditures was also a challenge due to the absence of a financial officer. While some processes and templates were put into place, most of them were reactively developed throughout the evolving situation. In addition, there was no formal process for documenting decision making.

Some City staff noted that there was a lack of communication and information, both within the City EOC and with partner agencies, resulting in a sense of regularly not having all the necessary information to make decisions. This was in part due to challenges in establishing formal communication channels and processes to enhance the flow of information.

Volunteer Management

Despite the GNWT's Evacuation Order, interviews with City staff, stakeholders, and responses from the PlaceSpeak survey indicate that some individuals decided to stay behind and volunteer their time to contribute to the protection of the city of Yellowknife. Although the City contracted select workers to conduct specified activities to protect the city of Yellowknife, other individuals chose themselves to remain in the city and offered their time and effort in a volunteer capacity. However, while contractors were provided with formal oversight and agreements with the City, which outlined payment and liability requirements, volunteers were not requested or coordinated by the City in an official capacity and therefore were not provided with oversight or protections. Interviews revealed that the City did not have the capacity or a defined process to coordinate and oversee volunteers. Although the City did not formally engage with volunteers, City staff raised significant liability concerns about members of the public offering their services without the necessary training and safety measures in place. These concerns were related to the safe operation of machinery being used to clear trees while creating firebreaks,

and ensuring the safe evacuation of volunteers if the wildfire reached firebreaks while work was underway.







EVACUATION PLANNING, RESPONSE, AND RECOVERY

Evacuation planning should identify the human and technical resources needed in both the evacuation area and the areas that could receive evacuees. This includes identifying resources required to assist evacuation, such as logistics management for the transportation and provision of shelter for evacuees, as well as assessment of the capabilities of personnel and equipment in providing support for evacuation. To ensure the appropriate resources are arranged to adequately support a mass evacuation, a rapid needs assessment and prioritization should be conducted in the response phase.

Another aspect of evacuation planning the evacuation of domestic animals, both for pet wellbeing and to reduce stress for their owners. Providing information about pets during an evacuation can reduce the number of community members who remain in evacuated areas due to unwillingness to abandon pets. Leading practices in emergency management indicate that co-evacuating people with their pets increases compliance with Evacuation Orders, reduces the number of requests for retrieval support, and decreases attempts at early re-entry to unsafe areas motivated by animal rescue. Leading practices also suggest that organizations should consider the resources available to shelter animals during mass evacuations, when they are not evacuated with their owners. This does not apply to qualified service animals, which should always be transported and sheltered with the person for whom they provide services.

Key Findings

Responsibility

	The City identified internal capacity issues and made the appropriate requests for assistance from partner agencies.	The City
	The City responded to requests from the public for pet support by working with local animal welfare organizations and developing a clear process for owners to submit requests for pet retrieval and care.	The City & the GNWT
	There were logistics challenges in evacuating residents to host communities outside of the city, inclusive of transportation within and outside of the city boundaries.	The City & the GNWT
	Host communities for evacuation of the entire city were not pre-identified or considered prior to the evacuation.	The GNWT
	A lack of clear protocols or processes for requests for assistance from the GNWT created some issues in receiving support.	The GNWT
	A lack of clear preparedness communications, guidelines for evacuating with pets, and supports for pet owners may have contributed to undue stress and pets being left behind and needing retrieval.	The City & the GNWT

Evacuation Logistics Management

During the 2023 wildfire season, there were ongoing discussions and disagreements between the City and the GNWT about different roles and responsibilities for managing logistics for the evacuation, particularly as the GNWT issued the Evacuation Order. According to the NWT Emergency Plan publicly available in 2023, it was the responsibility of the GNWT to work with the Local Authority to ensure the safety of the community and to coordinate evacuation transportation. As outlined in this plan, in cooperation with the Local Authority, the GNWT should determine the evacuation method and coordinate evacuation transportation requirements to the host community. The Local Authority should also identify priority groups and provide for the staging of evacuees, including local transportation. Although the City issued a request for assistance to the GNWT for support in evacuation planning, there was a continued lack of clarity regarding the different responsibilities for managing evacuation logistics.

Through interviews with stakeholders and the PlaceSpeak survey, many members of the public noted some of the logistical challenges they faced following the GNWT's issuance of the Evacuation Order. In the PlaceSpeak survey, 78% of respondents indicated that they evacuated within 24 hours after the Evacuation Order was announced by GNWT on August 16. This indicates that a significant portion of residents were trying to evacuate at the same time. One of the main modes of transportation was by road and interviewees noted that there were long lines of vehicles on the highway as people tried to leave. Many noted challenges in evacuating without there being fuel, food, and washroom stops along the highway.

Others faced logistical challenges in evacuating by air. The GNWT arranged flights to leave from a specified point of departure in the city. However, interviewees noted that there was uncertainty about how to reach the evacuation point, due to limited information regarding the availability of buses, taxis, and other methods of transportation within the city. Individuals also faced challenges once they reached the GNWT air evacuation site, with many waiting hours before boarding the plane, without access to seating, water, or food. This was a particular challenge for seniors, Elders, children, and others with physical limitations who struggled to remain standing for many hours. Others shared how they waited in lines all day only to be told that the flights were full for the day, and that they would need to return the following day. Interviews with airport staff, stakeholders, and members of the public that evacuated via planes organized by GNWT also indicated that there was a lack of efficient coordination of flights, with some flights leaving without being full.

Interviews with critical service workers revealed some issues with supply chain disruption because of the evacuation. In the week leading up to the evacuation, members of the public started stocking up on food and gas, which led to high demand and depletion of supplies in stores. Grocery stores, pharmacies, and gas servicing stations did not have advanced notice of the GNWT's Evacuation Order and therefore many did not order additional supplies leading up to the evacuation. The fire also affected the availability of fuel and food due to road closures and rerouting. The highway system operated on a first-come-first-serve basis, which did not prioritize food and fuel trucks, many of which ended up at the back of the line. Road closures and re-routes added significant delays in the delivery of supplies to the city of Yellowknife.

Host Communities

According to the NWT Emergency Plan that was publicly available in 2023, it is the responsibility of the GNWT to activate a host community, providing sufficient notice, and work with the host community to ensure evacuee fundamental needs are met. Once notified of the host community, the Local Authority should work with the GNWT and other regional officials to carry out the evacuation of residents.

Feedback from stakeholders and the public revealed a range of different experiences in host communities across Alberta, BC, Yukon, and Manitoba. Amongst PlaceSpeak survey respondents, 53% stayed with friends, family, or a secondary home once evacuated, and 15% stayed in government-organized accommodations although 48% of people did visit a government-hosted Reception Centre while they were evacuated. Some people had generally positive experiences in host communities, as they were provided with access to local facilities, provided with suitable accommodations, and given meal and transportation vouchers.

Others, however, had overall negative experiences in host communities. Some felt disoriented and lost when arriving in other communities and weren't aware of how to access resources provided by the Canadian Red Cross or other organizations. Some experienced issues in accessing food due to far distances between the Evacuation Centre where meals were provided, and the hotels in which they were staying. Some people also experienced challenges during evacuation, due to inadequate systems for prioritizing services and resources required for the support of vulnerable populations. Shelters were often not fully accessible or adequately equipped for seniors or people with disabilities, and there were barriers to accessing medications and food to meet specific dietary requirements. Due to challenges in Evacuation Centres, some people expressed in the PlaceSpeak survey that they arranged their own accommodations. However, for many, this came at a personal financial cost.

Capacity and Requests for Assistance

The City recognized a lack of resources, capacity, and from their perspective, jurisdiction with respect to implementing the Evacuation Order. Documentation shared by the City demonstrates that on August 15, the City put in a formal request for assistance from the GNWT. The request for assistance included the following:

- support for evacuation planning and support for sheltering in the community, including emergency social service support from the Department of Health and Social Services;
- evacuation planning for evacuation of residents out of the community;
- support for the Emergency Operations Centre in operations, advanced planning, supply personnel, and transportation logistics management;
- protection of GNWT infrastructure and assets;
- additional structural firefighting capacity to supplement the capacity of Yellowknife Fire Department.

Although the City conducted this request for assistance, City staff expressed that there was a lack of clarity provided by the GNWT on how to formally request assistance through re-established protocols or processes. Due to this lack of clarity regarding GNWT processes, as well as disagreements regarding the roles and responsibilities for different aspects of the evacuation process, there were delays in the City getting assistance.

Animals/Pets Management

Domestic animals are the direct responsibility of their owners. However, members of the public indicated in the PlaceSpeak survey and interviews they didn't have enough access to information about whether to evacuate with their pets or whether there would be supports for pets left behind. This included lack of knowledge of whether pets would be allowed on flights arranged by the GNWT, what equipment (such as cages or food) they would need to bring, or whether they would be permitted in hotels arranged in host communities. Because of this confusion and concern about the potential negative impacts on the wellbeing of their pets, some residents were reluctant to leave the city of Yellowknife. In some instances, the lack of clear communication and planning led to people refusing to evacuate altogether to avoid the potential separation from their pets. In other cases, pets were left behind in homes while their owners evacuated. While pets were allowed on GNWT arranged flights, members of the public said they would have benefited from more advanced information.

Staff of organizations that support animal welfare also reported through interviews that they felt unprepared to provide support during the evacuation, as their prior preparations had focused on a partial evacuation within the city of Yellowknife, involving the identification of land available to shelter animals in lower risk areas in the city, as opposed to an evacuation out of the community.

In response to many requests received from the public for pet support, on August 23, the City released information on their work with the Northwest Territories SPCA to support the retrieval of pets left behind. The City provided a Pet Retrieval Form through which members of the public could make a request for their pet to be checked on. This included providing consent of the homeowner or tenant for teams of Municipal Enforcement Division members, a locksmith, and animal care specialists to enter homes to ensure the safety of pets and provide continued care based on information provided by the owner.

Phase 3:

Recovery

The Recovery Section of this report provides key findings for the City's recovery activities including key strengths and areas for future improvement. It examines the following themes: Cross-Agency Coordination; Public Communications; Considerations for Vulnerable Populations; and Evacuation Planning, Response, and Recovery.

CROSS-AGENCY COORDINATION

Similar to the evacuation process, re-entry and recovery processes also require coordination between the different partners contributing to these efforts. This requires understanding roles and responsibilities for recovery between the different partners, as well as coordination of logistics and other considerations to support re-entry.

Key Findings		Responsibility
	The City and YKDFN issued a joint Road to Re-Entry Plan and informed residents of the key dates for re-entry.	The City & YKDFN
	There were some challenges in coordinating the re-entry process between the City and the GNWT due to a lack of clarity regarding roles and responsibilities.	The City & the GNWT

Coordination with YKDFN

On September 1, 2023, the City and YKDFN publicly issued a joint Road to Re-Entry Plan and informed residents of the key re-entry dates. This plan was developed in alignment with the Northwest Territories approach to phased re-entry. Interviews revealed that this demonstration of coordination between the City and YKDFN was helpful to increase trust in the process for members of both communities.

Coordination with the GNWT

Review of documentation shared by the City, and interviews with staff from the City and the GNWT, confirmed some challenges in coordinating the transition to the re-entry phase and determining when to announce the beginning of re-entry to the city of Yellowknife. This was in part due to lack of clarity around roles and responsibilities for re-entry and recovery, as well as disagreement about which government was primarily responsible for coordinating the re-entry process. The NWT Emergency Plan that was publicly available during 2023 indicated that when returning evacuees, Local Authorities should work with the GNWT to ensure the community is safe and identify priority groups. The City's request for assistance to GNWT for support for evacuation planning did not specifically address the need for support for re-entry.

PUBLIC COMMUNICATIONS

Leading practices indicate that organizations should provide communications during the recovery phase of a response by implementing the systems and procedures developed during the preparedness phase and as documented in recovery plans.

Key Findings		Responsibility
	Public communication was better coordinated for re-entry in comparison to the evacuation process.	The City & the GNWT
	The City provided residents with information about what to expect when returning to the city of Yellowknife, including specific actions they could take to ensure water and food safety.	The City



Limited communication about information related to mental health resources and financial assistance was a barrier for community recovery.

The City & the GNWT




According to the Northwest Territories (NWT) Emergency Plan that was publicly available in 2023, there is a shared responsibility between the Local Authority and the GNWT to provide updated information to the public regarding an evacuation, which includes the return of evacuees. Many stakeholders indicated in interviews that communications regarding the re-entry process were clearer than those distributed during the evacuation process. Some members of the public reported in interviews and the PlaceSpeak survey that the City did a good job of communicating information about what to expect when returning home, including how things may look different due to community protection efforts, which services were up and running, and steps to take when returning home to ensure water and food safety. The City also provided updates on the phased opening of different City programs and services, including the times each facility would be open and the specific hours of access. 24% of respondents to the PlaceSpeak survey found information about what services were available in the city of Yellowknife and assessment of the damage across the impacted area to be helpful.

Community members noted in the PlaceSpeak survey and interviews that information released by the GNWT on re-entry didn't always align with information released by the City and YKDFN. They noted that it was confusing to know which source of information to follow.

Some stakeholders and members of the public also indicated that specific information about the re-entry and recovery process was missing from public communications. As part of the PlaceSpeak survey, 27% of respondents indicated they needed more information about disruptions to local infrastructure and anticipated restoration timelines, 23% wanted more information related to insurance claims, and 21% indicated a need for mental health supports. Specific information that the public was looking for but did not have access to during re-entry included information about highway conditions, any continued fire risk along the highway, and fuel availability. People returning from far distances were also looking for information about available accommodations bordering the return route. Many community members are raised the issue of insufficient information shared about air quality and potential health impacts of smoke upon return. Other stakeholders also expressed concern for the lack of mental health support provided upon re-entry, for the general public as well as for those who had supported vulnerable populations throughout the evacuation process. Lack of communications about financial assistance provision was also noted by members of the public as a major barrier to recovery.

CONSIDERATIONS FOR VULNERABLE POPULATIONS

The Sendai Framework for Disaster Risk Reduction emphasizes the need to maintain continuity in operations and planning following disasters, as well the need to provide psychosocial support and mental health services during recovery. It emphasizes the importance of building back better, for preventing the creation of, and reducing existing, disaster risk. This can be done by addressing underlying risk factors cost-effectively through investment, versus relying primarily on post-disaster response and recovery.

Key Findings		Responsibility
	Organizations supporting vulnerable populations contributed significant efforts to support their clients in the recovery and re-entry process.	Vulnerable population organizations
	The evacuation process had many negative consequences for the recovery of vulnerable individuals.	The City & the GNWT
	Organizations supporting vulnerable population faced challenges in getting approval for early re-entry to establish supports for vulnerable populations	The City & the GNWT

Recovery for vulnerable populations

There were many challenges for vulnerable populations in the recovery and re-entry process, a responsibility that is shared between the City and the GNWT and wasn't specifically addressed by the City in their request for assistance from the GNWT. The City's request for assistance to GNWT for support for evacuation planning did not specifically address the need for support for re-entry.

Interviews revealed some issues for evacuees receiving information about how and when to return, particularly those who faced communication barriers. This includes issues for displaced community members who didn't have cell phones or direct ways of receiving information or registering for repatriation flights. Some experienced confusion, particularly due to uncertainty about the times that flights chartered by the GNWT would return to the city of Yellowknife. Some individuals noted that they received a knock on the door of their hotel room in the host community and were told they only had a few minutes to get ready before their flight was leaving. Several members of the community and organizations interviewed raised the concern that some individuals or families may have been lost and may have never returned to the city.

Many stakeholders discussed the negative impacts of the evacuation and re-entry process on their overall wellbeing, identified gaps in supports provided to support recovery. The stress and trauma of evacuating the city of Yellowknife had a lasting impact on many community members. While some had positive experiences and were able to spend time visiting family or friends in other communities, others experienced extreme challenges, ranging from psychological to physical to financial. Members of the public noted that there was no process for public debriefing and recovery from such a traumatic event. They also noted that there were limited options to receive mental health support during the re-entry and recovery phase. This includes members of the public, as well as City staff that worked throughout emergency response.

Interviews with organizations that support vulnerable populations revealed that in the days and weeks after community members returned to the city, there was a reported 300% increase in use of emergency shelters in the community. Furthermore, some people with disabilities expressed that due to loss of homes, possessions, aids, equipment, and support networks during the evacuation, there was significant harm to their mental and physical health. Many reported experiencing post-traumatic stress disorder, increased anxiety, depression, eating disorders, flare ups of pre-existing medical conditions, high blood pressure, miscarriage, substance abuse, and feelings of isolation. Other members of the community struggled greatly with the impacts of smoke upon return to the city of Yellowknife and noted that more support was needed for those with health issues that could not tolerate the low air quality. One stakeholder reflected that it wasn't until mid-October that the health risk due to smoke decreased, and that very few air purifiers were available in the city of Yellowknife for people to escape the smoke.

Other interviewees and survey participants shared how they experienced significant financial impacts due to the evacuation, including financial loss and reduced work opportunities. For low-income individuals and families, the cost of evacuation was severe, with many people falling deep into debt due to expenses associated with transportation, accommodations, and loss of pay or employment. While some members of the community were able to get reimbursements, either through pre-purchased insurance or GNWT support, the extent of financial impacts on many community members is unknown.



Through the PlaceSpeak survey, 40% of respondents ranked the City's overall implementation of the re-entry and recovery process to be very poor or poor, while 32% ranked it as moderate. It should be noted that this may not reflect a nuanced understanding of the shared roles and responsibilities between the City and the GNWT.

Organizations supporting vulnerable populations

Interviews with organizations that support vulnerable populations revealed the considerable efforts that staff of these organizations contributed to supporting their clients in re-entry and recovery. However, some of these organizations also shared how they faced challenges in supporting vulnerable populations due to confusion in the re-entry process, particularly regarding the process for being identified as critical worker for early re-entry to the city. Because of delays or barriers to being designated as critical services workers, some staff faced challenges in balance personal recovery and setting up support systems before the populations they serve returned to the city of Yellowknife. As a result, some vulnerable people could not access necessary supports such as shelters for the first few days after their return.

EVACUATION PLANNING, RESPONSE, AND RECOVERY

Recovery includes restoring and transitioning operations from those measures adopted during an incident, back to normal business operations. This includes restoration of functions, services, resources, facilities, programs, and infrastructure. Following an evacuation, recovery includes the re-entry of community members and support for the re-establishment of city services. Recovery programs provide a valuable opportunity to develop and implement measures to strengthen resilience. Recovery efforts should be conducted with a view towards disaster risk reduction and building back better. Leading practices indicate that the general planning for recovery should be conducted prior to the occurrence of a crisis to ensure all considerations are included to support the community.

Key Findings	Responsibility
 <p>The City had not conducted planning for recovery and re-entry prior to the 2023 wildfire season.</p>	The City
 <p>Challenges in coordinating the designation of critical service workers created some confusion for the public during the re-entry process.</p>	The City & the GNWT

Recovery and re-entry planning

Prior to the 2023 wildfire season, the City had not conducted comprehensive planning for recovery specific to a mass evacuation of the city. This includes planning specific to re-entry after an evacuation of Yellowknife. Planning for re-entry and recovery was instead conducted in the response phase.

As demonstrated by documentation shared by the City and interviews conducted, the decision to initiate the re-entry of community members to the city of Yellowknife after the evacuation was predicated by an assessment of risk. Informed by expert advice on wildfire risk provided by ECC, the City conducted a risk assessment to determine whether it was safe for evacuees to return to the city of Yellowknife. This included both risk from wildfire activity, as well other considerations like the state of transportation routes, assessment of critical infrastructure and property damage, along with health, environmental, economic, social, cultural, and financial considerations. After assessing this risk and determining that the city of Yellowknife was safe for re-entry, the City started to implement a phased re-entry plan. This began with requesting the GNWT to rescind the Evacuation Order in alignment with this re-entry plan.

Phased re-entry process and critical service workers

The documentation reviewed demonstrates some disagreement regarding the responsibility for coordinating the return of critical service workers between the City and the GNWT, which contributed to public confusion. The NWT Emergency Plan that was publicly available during 2023 indicates that when returning evacuees, Local Authorities should work with the GNWT to identify priority groups.

On August 28, the City announced that as part of Phase 3 of the re-entry process, they were starting to contact businesses identified as critical for the re-establishment of critical services within the city of Yellowknife, to ask them to bring back their critical staff. While many critical service workers expressed that this process worked quite well, other groups expressed in interviews how they faced challenges in being identified as critical workers. It was noted that there was not enough time for critical service workers to return and re-establish services before the general population returned. Some community members noted that it took several days for critical services, such as grocery stores, to recall their staff, get stocked, and re-open their stores at full capacity. This was also the case for many organizations that support vulnerable populations, who reported challenges in being identified as critical workers for early return, resulting in issues for re-establishing services for vulnerable populations before their return. Interviewees identified a need for earlier re-entry of critical service workers and organizations supporting vulnerable populations to allow more time before the return of the general population.



On September 5, the City issued a request for volunteers to assist in driving returning residents from the airport to their homes. Many stakeholders expressed great appreciation for the work of City staff and others in greeting returning evacuees at the airport and arranging transportation home. However, it was also noted that there wasn't clear information on insurance requirements or vetting processes for volunteer drivers, which created issues of liability for the City.

Recommendations

The following recommendations are organized across 5 themes: Cross-Agency Coordination; Public Communications; Considerations for Vulnerable Populations; Emergency Operations Centre and Continuity Management; and Evacuation Planning, Response, and Recovery.

Considerations

The following recommendations assume that the responsibility for their implementation rests with the City. This is based on the NWT Emergency Plan which was recently updated in 2024 and includes notable shifts in roles and responsibilities between the GNWT and Local Authorities. It is important to note that the updated NWT Emergency Plan does not include any considerations unique to the City as a Local Authority associated with emergency events. The experiences from the 2023 North Slave Complex Wildfires suggests it may be appropriate to consider whether the City is unique from other Local Authorities in the Northwest Territories as it relates to emergency events, particularly as it relates to roles and responsibilities between the City and the GNWT.



The City may make an agreement with the GNWT, or pro-actively submit formal requests for assistance to the GNWT associated with emergency management responsibilities, including any responsibilities associated with the following recommendations, if the City does not have the capacity to fulfill that responsibility. However, for the purposes of this report it is assumed no such agreement is in place, nor any pro-active request for assistance submitted.



For each recommendation, an “initial prioritization” has been applied for consideration by the City using an Effort/Impact Matrix shown in Figure 6. See the section on “After Action Assessment Approach” for details regarding the initial prioritization.



Figure 6: Effort/Impact Matrix for Initial Recommendation Prioritization


CROSS-AGENCY COORDINATION



#	Relevant Key Findings	Recommendation	Priority
1	<p>The City did not extensively coordinate with partner organizations on preparedness activities (e.g., planning workshops, emergency exercises, the development of planning documentation) in relation to complex emergency/evacuation scenarios.</p>	<p>Involve partners and stakeholders in emergency planning efforts to ensure a shared understanding of roles and responsibilities and improve future coordination.</p> <p>Rationale: “Engagement from all of society” is one of the Guiding Principles of the Sendai Framework for Disaster Risk. Further, CSA Z1600:17 (R2022) states that “engaging stakeholders in the planning process ensures the full context of the planning environment is considered, including impacts, jurisdiction, responsibilities, authority, and individual and collective capacities”.</p>	<p>Major Projects</p> 
2	<p>Lack of shared understanding of roles and responsibilities and communication protocols between the City and the GNWT contributed to significant challenges for the coordination of response efforts.</p> <p>The timing of the declaration of the State of Local Emergency may have led to delays in the acquisition of resources and equipment.</p>	<p>Coordinate with the GNWT to establish a formal decision-making process for shared responsibilities associated with declarations of states of emergency, Evacuation Notices, Alerts, and Orders, and other response and recovery related activities.</p> <p>Rationale: One of the Guiding Principles for the implementation of the Sendai Framework for Disaster Reduction is that “Disaster risk reduction and management depends on coordination mechanisms within and across sectors and with relevant stakeholders at all levels, and it requires the full engagement of all State institutions of an executive and legislative nature at national and local levels and a clear articulation of responsibilities across public and private stakeholders, including business and academia, to ensure mutual outreach, partnership, complementary in roles and accountability and follow-up”. CSA Z1600:17 (R2022) also states the importance of facilitating the development of clear roles, responsibilities, and lines of communication.</p>	<p>Major Projects</p> 

#	Relevant Key Findings	Recommendation	Priority
3	<p>There was a lack of clarity in the interpretation of the <i>Emergency Management Act</i>, particularly once the Government of the Northwest Territories declared a territorial state of emergency and issued the Evacuation Order on August 16, 2023.</p>	<p>Coordinate with the GNWT to ensure a shared understanding and interpretation of the <i>Emergency Management Act</i>, particularly with respect to roles and responsibilities following the declaration of a Territorial State of Emergency by the GNWT.</p> <p>Rationale: At the national and local levels, the Sendai Framework for Disaster Risk Reduction suggests that it is important to “assign, as appropriate, clear roles and tasks to community representatives within disaster risk management institutions and processes and decision-making through relevant legal frameworks...”.</p>	<p>Quick Wins</p> 
4	<p>Lack of shared understanding of roles and responsibilities and communication protocols between the City and the GNWT contributed to significant challenges for the coordination of response efforts.</p> <p>There were significant challenges in establishing consistent liaison between the City and the GNWT during the response phase.</p> <p>There were some challenges in coordinating the re-entry process between the City and the GNWT due to a lack of clarity regarding roles and responsibilities.</p>	<p>Work with the GNWT to establish a common understanding of roles and responsibilities, including communication and coordination channels, to formalize information sharing and institutionalize the relationship between different government levels.</p> <p>Rationale: CSA Z1600:17 (R2022) indicates that emergency plans should incorporate a pre-established structure and process to gather and disseminate information to both internal and external stakeholders. ISO 22396:2020 reinforces the value in formalizing information exchange practices between the City, the GNWT, and other partners.</p>	<p>Major Projects</p> 



#	Relevant Key Findings	Recommendation	Priority
5	<p>Challenges in coordinating the designation of critical service workers created some confusion for workers about whether to remain or evacuate.</p>	<p>Coordinate with the GNWT on the designation and management of critical service workers during evacuation scenarios comparable to the 2023 North Slave Complex Wildfires.</p> <p>Rationale: CSA Z1 600:17 (R2022) indicates the importance of understanding the individuals and organizations that serve critical roles, and ISO 22315:2014 reinforces the importance of this in the context of mass evacuations.</p>	<p>Quick Wins</p>
6	<p>Integration of representatives of the Yellowknives Dene First Nation (YKDFN) into the City EOC contributed to excellent coordination of response efforts and communications.</p> <p>The City and YKDFN issued a joint Road to Re-Entry Plan and informed residents of the key dates for re-entry.</p>	<p>Continue to partner with YKDFN by inviting one or more representatives to the City EOC during major activations to enhance the coordination of response actions and development and delivery of joint communications.</p> <p>Rationale: Several of the ISO 22396:2020 “guiding principles” for information exchange were reflected in the invitation of YKDFN into the City EOC, including “trust and willingness” and “commitment to share”.</p>	<p>Quick Wins</p>
7	<p>FireSmarting, including the installation of fire breaks and sprinklers, was conducted during the response phase rather than the mitigation/preparedness phase.</p> <p>A review of documentation indicated that in 2019 several of the recommendations from the 2012 Community Wildfire Protection Plan had not been completed.</p>	<p>Regularly review and update the City of Yellowknife Community Wildfire Protection Plan (and comparable wildfire risk management documentation) and consider opportunities to coordinate with the GNWT and neighbouring communities on wildfire mitigation and risk reduction measures in advance of wildfire seasons.</p> <p>Rationale: The National Research Council National Guide for Wildland-Urban Interface (WUI) Fires recommends that wildfire risk assessments be reviewed at minimum every five years. These risk assessments should inform risk reduction measures.</p>	<p>Major Projects</p>

PUBLIC COMMUNICATIONS

#	Relevant Key Findings	Recommendation	Priority
8	<p>The lack of coordinated, clear, and detailed communications from the City and the GNWT contributed to significant confusion and stress within the community.</p> <p>Many members of the public and stakeholders expressed a lack of overall confidence and trust in the preparedness of the City and the GNWT.</p>	<p>Collaborate and coordinate with the GWNT on public communications related to a city-wide evacuation to identify opportunities to align approach, timing, content, and audience prior to the release of information.</p> <p>Rationale: One of the Guiding Principles for the implementation of the Sendai Framework for Disaster Reduction is that “Disaster risk reduction and management depends on coordination mechanisms within and across sectors and with relevant stakeholders at all levels, and it requires the full engagement of all State institutions of an executive and legislative nature at national and local levels and a clear articulation of responsibilities across public and private stakeholders, including business and academia, to ensure mutual outreach, partnership, complementary in roles and accountability and follow-up”. CSA Z1600:17 (R2022) also states the importance of facilitating the development of clear roles, responsibilities, and lines of communication.</p>	<p>Quick Wins</p> 

#	Relevant Key Findings	Recommendation	Priority
9	<p>Public communications were not planned or coordinated between the City and the GNWT in advance of the 2023 North Slave Complex Wildfires.</p> <p>Feedback from members of the public indicates a lack of accessible or widely communicated information regarding personal preparedness actions for individuals and families.</p> <p>Detailed information about plans to evacuate were not shared with the public in advance of the evacuation.</p> <p>Limited communication about information related to mental health resources and financial assistance was a barrier for community recovery.</p>	<p>Develop a strategy for managing public information before, during and after evacuations to ensure that communications to the public are clear, accessible, informative, and timely. This strategy should include templates, draft messaging, guidelines, contact information, and channels for communication with partners and the public. The strategy should also include procedures for the timely issuance of Evacuation Notices, Alerts, and Orders through various communication channels.</p> <p>Rationale: ISO 22322:2022 indicates that the dissemination of public warnings should leverage multiple communication channels simultaneously and in a complementary way. The updated 2024 NWT Emergency Plan allocates responsibility to the City for conducting public communications related to evacuations (Annex A, section 5.3).</p>	
10	<p>The lack of advanced and detailed updates about community protection and preparedness measures being taken by the City contributed to anxiety within the community.</p>	<p>Prepare and communicate materials to enhance public awareness of the City’s wildfire mitigation and preparedness efforts that have been taken, are planned for, or are underway.</p> <p>Rationale: The Sendai Framework for Disaster Risk Reduction advises it is important to “make non-sensitive hazard-exposure, vulnerability, risk, disaster and loss-disaggregated information freely available and accessible, as appropriate”, and to “promote real time access to reliable data”.</p>	

CONSIDERATIONS FOR VULNERABLE POPULATIONS





<p>11</p>	<p>Feedback from members of the public indicates a lack of accessible or widely communicated information regarding personal preparedness actions for individuals and families.</p>	<p>Consider opportunities to increase the accessibility and reach of information and guidance to support personal preparedness efforts.</p> <p>Rationale: CSA Z1 600:17 (R2022) indicates that organizations should develop and implement programs for public awareness and education where the public may be impacted by an incident. The GBA+ includes identifying potential barriers that diverse populations may experience, including in public communications.</p>	<p>Incremental Tasks</p> 
<p>12</p>	<p>Preparedness and planning efforts did not adequately address the unique needs of vulnerable populations.</p> <p>There was not a full understanding of the vulnerabilities and needs of unique populations during response and re-entry.</p> <p>The evacuation process had many negative consequences for the recovery of vulnerable individuals.</p> <p>Measures were not put in place to ensure the safety of vulnerable individuals during the evacuation and re-entry to the city of Yellowknife.</p>	<p>Consider the needs of vulnerable populations in all evacuation planning, response and recovery activities and implement a system to register these individuals to ensure their safety during evacuation and re-entry. Involve local organizations that support vulnerable populations in the planning efforts.</p> <p>Rationale: As outlined in "Emergency Management Strategy for Canada: Toward a Resilient 2030"⁶⁹: it is important to consider that the impacts of disasters are not uniform across society, and that different variables can intersect and contribute to the level of risk facing vulnerable populations (e.g., gender, age, disability, socioeconomic conditions)". Further, ISO 22395:2018 indicates the importance of understanding and implementing best practices for recognizing and including vulnerable persons in all phases of emergency management. The GBA+ approach emphasizes the need to consider how diverse groups of people may have different experiences in life (or emergency) situations, through the application of an intersectional approach to planning and program development. Under the NWT Emergency Management Act, Local Authorities are the lead on local emergency plans responsible for the safety and well-being of all of their residents, including vulnerable populations. The updated 2024 NWT Emergency Plan assigns responsibilities for providing support to vulnerable</p>	<p>Quick Wins</p> 



⁶⁹ Emergency Management Strategy for Canada, Public Safety Canada, 2019, <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/mrgncy-mngmnt-strtg/mrgncy-mngmnt-strtg-en.pdf>.
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		populations in an evacuation to Local Authorities. This includes considering, planning, and working with partners to provide supports to vulnerable people in the event of an emergency and/or evacuation (Appendix 3, General).	
13	Vulnerable populations with specific needs faced additional challenges during the evacuation process.	<p>Establish a position within the City EOC that can be activated to coordinate with local organizations supporting vulnerable populations to enhance coordination and communication.</p> <p>Rationale: ISO 22395:2018 suggest that organizations should establish information sharing arrangements that may enhance the support of vulnerable persons during emergencies.</p>	
14	<p>Vulnerable populations with specific needs faced additional challenges during the evacuation process.</p> <p>Measures were not put in place to ensure the safety of vulnerable individuals during the evacuation and re-entry to the city of Yellowknife.</p>	<p>Provide advance and direct communications to organizations supporting vulnerable populations when the City is considering issuing an Evacuation Order. This will allow time for preparations to support these populations.</p> <p>Rationale: ISO 22395:2018 indicates the value in establishing information sharing arrangements between local emergency management practitioners and organizations supporting vulnerable populations. Organizations supporting vulnerable populations will have unique insights that may reduce risk and support urgent response efforts. The updated 2024 NWT Emergency Plan assigns responsibilities for providing support to vulnerable populations in an evacuation to Local Authorities. This includes considering, planning, and working with partners to provide supports to vulnerable people in the event of an emergency and/or evacuation (Appendix 3, General).</p>	


EOC AND CONTINUITY MANAGEMENT




#	Relevant Key Findings	Recommendation	Priority
15	The lack of prior ICS training and exercises for City staff contributed to delays in the EOC becoming fully functional and in the fulfillment of each role.	<p>Develop an emergency management training plan for City staff that includes:</p> <ul style="list-style-type: none"> • the frequency and scope of training; • ICS training for all City staff that may serve in roles within and/or in support of the City’s EOC; • enhanced ICS Training (e.g., ICS 300 and ICS 400) for City staff that may serve in leadership roles within the City’s EOC (e.g., Incident Command / EOC Director, Liaison Officer, Information Officer, Section Leads, etc.); and, • an ongoing record of training completed. <p>Rationale: CSA Z1600:17 (R2022) indicates that organizations should develop strategies for competency-based training and education. ISO 22315:2014 also indicates that organizations should make training and exercising an integral component of their planning process.</p>	<p>Major Projects</p>
16	Documentation processes were not appropriately managed during the initial activation of the EOC.	<p>Establish clear City EOC documentation processes to manage information, including templates, tracking documents, clear internal communication channels for the sharing of information, and documentation filing approaches.</p> <p>Rationale: CSA Z1600:17 (R2022) outlines the need for records management, which includes establishing an effective records management process, and documenting and maintaining records of activities and decisions.</p>	<p>Incremental Tasks</p>

#	Relevant Key Findings	Recommendation	Priority
17	<p>Documentation processes were not appropriately managed during the initial activation of the EOC.</p> <p>The lack of prior ICS training and exercises for City staff contributed to delays in the EOC becoming fully functional and in the fulfillment of each role.</p>	<p>Review and consider revisions to the City's EOC documentation based on lessons observed during the 2023 activation, including documentation guiding the activation of the City EOC and position-specific procedures.</p> <p>Rationale: As per the CSA Z1600:17 (R2022), the City should have processes and procedures for the activation, operation, coordination, and communication of plans. The CSA Z1600:17 (R2022) also advocates for continual improvement, inclusive of corrective action planning and review.</p>	<p>Quick Wins</p> 
18	<p>The welfare of City staff was not fully contemplated during the initial activation of the EOC.</p>	<p>Ensure the safety and wellbeing of staff activated to the City's EOC.</p> <p>Rationale: The Canadian Incident Command System includes the activation of a Safety Officer within the EOC, who is responsible for ensuring overall operational safety and wellness for EOC staff. This aligns with the priority for the safety and health of all responders in emergency management.</p>	<p>Incremental Tasks</p> 
19	<p>Lack of business continuity planning documentation and practices increased the risk of disruptions to critical City operations during the activation of the City's EOC and evacuation of City staff.</p>	<p>Conduct a risk assessment to identify risks to critical City services and potential impacts of disruptions on critical services and resources, to inform continuity planning efforts.</p> <p>Rationale: CSA Z1600:17 (R2022) outlines the need for risks assessments to be completed to identify, analyze, and evaluate risks that may disrupt the City's operations and delivery of critical services.</p>	<p>Quick Wins</p> 
20	<p>The City does not have a business continuity management program.</p>	<p>Establish and maintain a continuity management program for the City.</p> <p>Rationale: CSA Z1600:17 (R2022) outlines the standard for emergency and continuity programs; it describes the need for commitment from senior leadership, appointing a program coordinator, and establishing a committee to provide strategic in support of the program.</p>	<p>Quick Wins</p> 

#	Relevant Key Findings	Recommendation	Priority
21	Lack of business continuity planning documentation and practices increased the risk of disruptions to critical City operations during the activation of the City's EOC and evacuation of City staff.	<p>Develop continuity plans for the City across all departments, which include the identification of critical City services and the staff required to ensure the continuity of these services.</p> <p>Rationale: CSA Z1600:17 (R2022) outlines the need to document how the City will manage risks to its operations and critical services, including documenting the continuity management structure and relevant procedures.</p>	
22	Absence of a volunteer management coordinator or strategy led to lack of City oversight and created liability and safety concerns.	<p>Plan for the involvement of spontaneous volunteers during emergency response and recovery. The planning effort should consider whether, how, and when spontaneous volunteers can support City response and recovery efforts.</p> <p>Rationale: ISO 22319:2017 indicates the need to consider how responsibility will be assigned for leading, managing, and coordinating with spontaneous volunteers. Additional planning steps are outlined within the standard, including clarifying issues of liability, and considering the roles and motivations of the volunteers.</p> <p>Under the updated 2024 NWT Emergency Plan, volunteers need to be registered with Local Authorities to be protected under the Worker's Compensation Act (Appendix 3, Non-Government Organizations).</p>	

EVACUATION PLANNING, RESPONSE, AND RECOVERY

#	Relevant Key Findings	Recommendation	Priority
23	<p>The City's emergency plan and preparedness efforts prior to the 2023 North Slave Complex Wildfires did not include a detailed plan to support the mass evacuation of the City due to wildfires.</p> <p>The City had not conducted planning for recovery and re-entry prior to the 2023 wildfire season.</p> <p>Organizations supporting vulnerable population faced challenges in getting approval for early re-entry to establish supports for vulnerable populations.</p> <p>Challenges in coordinating the designation of critical service workers created some confusion for workers about whether to remain or evacuate.</p> <p>There were logistics challenges in evacuating residents to host communities outside of the city, inclusive of transportation within and outside of the city boundaries.</p>	<p>Develop a detailed wildfire evacuation plan that incorporates:</p> <ul style="list-style-type: none"> • roles and responsibilities for the City and partner organizations; • evacuation decision procedures; • public communications procedures; • response procedures for partial or total evacuation of the community; • response procedures for supporting evacuees including consideration for the unique needs of vulnerable populations; • logistics processes and considerations relevant to evacuations; and • recovery and re-entry processes and considerations. <p>Rationale: CSA Z1600:17 (R2022) and ISO22315 outline the need for detailed response plans that describe the procedures and actions that will be taken during emergencies. Under the updated 2024 NWT Emergency Plan, Local Authorities have the responsibility for developing and maintaining community emergency plans which include evacuation and hosting procedures (Annex A, section 2.2).</p>	<div data-bbox="1713 244 1899 419" style="border: 1px solid black; background-color: #0056b3; color: white; padding: 5px; text-align: center;"> <p>Major Projects</p>  </div>

#	Relevant Key Findings	Recommendation	Priority
24	Host communities for evacuation of the entire city were not pre-identified or considered prior to the evacuation.	<p>In collaboration with the GNWT, and as appropriate given interjurisdictional protocols, identify potential host locations for evacuees to support planning efforts. Where possible, pre-establish relationships, communication channels, and agreements.</p> <p>Rationale: ISO22315 indicates that organizations planning for mass evacuations should identify and gather information regarding suitable shelters sites. The updated 2024 NWT Emergency Plan allocates responsibility for identifying host communities and ensure plans with host communities are in place to support evacuated residents (Annex A, section 2.2).</p>	
25	A lack of clear protocols or processes for requests for assistance from the GNWT created some issues in receiving support.	<p>Develop a clear understanding of what resources are anticipated to be required during future evacuations, and the capacity of the City to meet those requirements. For anticipated requirements beyond the City's capacity, consider preparing and delivering anticipated requests for assistance to the GNWT in advance of emergencies.</p> <p>Rationale: CSA Z1600:17 (R2022) indicates the need for emergency plans to identify logistics support and resource requirements, as well as the need to implement resource management procedures for human, physical, financial and information resources. The updated 2024 NWT Emergency Plan allocates responsibility to the City to request assistance for evacuation or hosting supports from the GNWT due to capacity being exhausted (Annex A, section 2.2).</p>	
26	A lack of clear preparedness communications, guidelines for evacuating with pets, and supports for pet owners may have contributed to undue stress and pets being left behind and needing retrieval.	<p>In collaboration with the GNWT and relevant local organizations, incorporate considerations and procedures for pets and animals in the City's evacuation plan.</p> <p>Rationale: ISO 22315:2014 suggests that to support estimations of shelter demand, organizations should consider the resources available to shelter animals during mass evacuations.</p>	

Appendix A: Project Methodology

The City commissioned KPMG LLP through a competitive process to lead an independent After-Action Assessment (AAA) of the City's emergency response to the 2023 wildfires which threatened the community. The purpose of the AAA is to identify and document strengths, areas for improvement and gaps in existing emergency preparedness and response capabilities.

This AAA is a qualitative, evidence-based review of actions taken before, during, and after the City's emergency response to the 2023 wildfires. It does not assess individual performances or competencies – it instead focuses on the organizational and system-level challenges that are recommended to be addressed based on leading practices and industry standards.

The City was not involved in providing direction to the KPMG Team in what was or was not captured within the AAA.

KPMG used the following approach to complete the AAA:

- 1. Documentation and Data Gathering:** This activity included gathering internal and public-facing documentation, communication records, and relevant data that may have provided insight regarding the mitigation, preparedness, response, and recovery efforts undertaken by the City, before, during and after the 2023 wildfires. This documentation and data were reviewed by subject matter experts to inform future engagement efforts, analysis, and the ensuing AAA Report.
- 2. Public, Partner, and Stakeholder Engagement:** The project included a range of engagement activities, which intended on gathering diverse perspectives and insights to inform the AAA. These engagements included:
 - Virtual interviews with 24 partner and stakeholder organizations. See Appendix B for a full list of partner and stakeholder organizations engaged;
 - A virtual survey delivered to city of Yellowknife residents via PlaceSpeak and direct emails sent to the KPMG team. See Appendix C for the Results of this public virtual survey;
 - An in-person public engagement workshop held at the Yellowknife Multiplex Arena.
 - An in-person engagement with local media;
 - An in-person engagement with City Emergency Operations Centre personnel; and
 - Virtual interviews with 9 City staff across departments.
- 3. Analysis:** Using the information, insights, and perspectives gathered in the previous steps, analysis was conducted to understand:
 - What was expected to happen?
 - What actually occurred?
 - What went well and why?
 - What can be improved and how?

In support of the analysis that focused on the above questions, leading practices and standards including the Sendai Framework for Disaster Risk Reduction, the Canadian Standards Association's standard on Emergency and Continuity Management Program (CSA Z1600:17 (R2022)17), and the National Guide for Wildland-Urban Interface (WUI) Fires were used to inform evidence-based recommendations.



- 4. Reporting:** The combination of the preceding steps led to the development of this AAA report which contains independent, evidence-based recommendations identified throughout the process.

Appendix B: Partner and Stakeholder Engagement

This After-Action Assessment used a mixed methods approach. KPMG engaged with more than 60 individuals representing the City, stakeholders, critical service workers, and emergency management partners. This included 29 online interviews with the stakeholders and partners listed below. KPMG also conducted a workshop with representatives from different media channels.

In addition to engagement with stakeholders and partners, KPMG also met with City staff, both individually through interviews with Directors and in a workshop on March 26, 2024, for staff involved in the 2023 wildfire response. The City's Mayor and Councilor's were also interviewed individually to better understand their roles in the response. Additionally, feedback was collected from the public.

KPMG also gathered information on lived experiences during a Public Engagement Session held in person at the Multiplex Centre on March 27, 2024. Around 200 members of the public gathered to share their input. Further feedback from the public was collected through an online public survey administered through PlaceSpeak, open from March 25 to April 12, 2024. A total of 463 residents shared their perspectives on the mitigation, preparedness, response, and recovery efforts through this survey. Other residents shared their feedback by emailing the KPMG team directly.

Conversations were also held with staff representatives of Yellowknives Dene First Nation who were involved in coordination of response efforts.

Below are key partners and stakeholders that KPMG interviewed as part of this engagement.

Government of the Northwest Territories	<ul style="list-style-type: none"> • Department of Environment and Climate Change (ECC) • Department of Municipal and Community Affairs (MACA) • Department of Health and Social Services Authority (HSSA)
City of Yellowknife	<ul style="list-style-type: none"> • City Mayor and Council • City Staff <ul style="list-style-type: none"> • City Manager • Corporate Services (including IT and Financial Services) • Economic Development and Strategy • Planning & Development • Public Safety (including Fire Division) • Public Works and Engineering
First Nation Partners	<ul style="list-style-type: none"> • Yellowknives Dene First Nation
Non-governmental organizations that support vulnerable populations	<ul style="list-style-type: none"> • Yellowknife Women's Society • Young Women's Christian Association (YWCA) • The Salvation Army Yellowknife • Home Base Youth Centre • AVENS Senior Centre • Yellowknife Seniors' Society • NWT Disabilities Council • Native Women's Association
Media	<ul style="list-style-type: none"> • Cabin Radio • NNSL • CBC • Aboriginal Peoples Television Network • Médias ténos
Emergency Professionals	<ul style="list-style-type: none"> • RCMP • Coast Guard • Canada Task Force 2 (CAN-TF2)

	<ul style="list-style-type: none"> • Joint Task Force North/Department of National Defense (JTFN)
Contractors	<ul style="list-style-type: none"> • Det'on Cho Logistics • Kavanaugh Brothers Ltd
Utility Providers	<ul style="list-style-type: none"> • Northland Utilities (Yellowknife) Limited • NWT Power Corporation • Northwest Telecoms
Support Services	<ul style="list-style-type: none"> • Sutherland's Drugs Ltd • Yellowknife Co-op • Yellowknife Airport
Public Engagement	Public engagement was conducted through a public engagement session on March 27, 2024, a PlaceSpeak survey, as well as direct emails sent to the KPMG team.

Appendix C: Results of Public Survey

This Appendix summarizes the results of a survey available for residents of Yellowknife through PlaceSpeak from March 25-April 12, 2024. There were 463 survey respondents.

Mitigation/Preparedness			
Question	Options	Number of Responses	%*
1. How would rate your understanding of wildfire risk in the City of Yellowknife prior to the 2023 wildfire season?	Very High	38	9%
	High	88	20%
	Moderate	174	40%
	Low	89	21%
	Very Low	45	10%
	No Response	29	-
2. How would you rate your own / your family's personal preparedness prior to the 2023 wildfire season?	Very High	25	6%
	High	68	16%
	Moderate	169	39%
	Low	127	29%
	Very Low	45	10%
	No Response	29	-
3. What preparedness activities had you undertaken prior to the 2023 wildfire season? (Choose all that apply)	Develop a personal/family emergency plan	182	40%
	Develop a personal/family emergency kit and/or "grab-and-go" bags	129	28%
	Research insurance coverage	67	15%
	Protect your home using FireSmart guidance/other wildfire risk mitigation measures	70	15%
	Other	7	2%
4. Were you aware of the distinction between an "Evacuation Alert" and "Evacuation Order" prior to the 2023 wildfire season?	Yes	131	72%
	No	51	28%
	No Response	281	-
5. What would enhance your / your family's personal preparedness? (Choose all that apply)	More information / guidance to increase awareness of risks	130	34%
	More information / guidance to increase personal preparedness	118	31%
	More in-person learning opportunities	33	9%
	More virtual learning opportunities	42	11%
	Other	59	15%
6. Specific to the Evacuation Alert issued for residents in Kam Lake Business District, Grace Lake, and the Engle Business District on August 15, 2023: How would you rank your confidence in knowing what next steps you/your family needed to take after the	Very High	30	7%
	High	34	8%
	Moderate	42	10%
	Low	96	22%
	Very Low	103	24%
	Not Applicable	128	30%
	No Response	30	-

Evacuation Alert was issued?			
7. Leading up to the issuance of the Evacuation Order by the Government of the Northwest Territories for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail on August 16, 2023: How would you rate the extent of information you received regarding the risk and the preparedness actions you/your family could take?	Very High	8	2%
	High	26	6%
	Moderate	50	12%
	Low	139	32%
	Very Low	209	48%
	No Response	31	-

*Percentages calculated based on number of respondents (i.e., non-responses excluded)

Response			
Question	Options	Number of Responses	%*
8. Specific to the Evacuation Alert issued for residents in Kam Lake Business District, Grace Lake, and the Engle Business District on August 15, 2023: How did you/your family respond after hearing about the Evacuation Alert? (Choose all that apply)	Designated a meeting area for family members	27	5%
	Packed essential items	105	21%
	Prepared to move disabled persons, children, and/or neighbours if assistance was needed	26	5%
	Arranged transportation for all household members and pets	79	16%
	Filled gas tanks to full	100	20%
	Monitored the City's website and social media for information	92	18%
	Arranged accommodation for household members	29	6%
	Evacuated before an Evacuation Order was issued	40	8%
9. Specific to the Evacuation Alert issued for residents in Kam Lake Business District, Grace Lake, and the Engle Business District on August 15, 2023: When did you first hear about the Evacuation Alert?	Not applicable	86	21%
	Tuesday, August 15, 2023	275	67%
	Wednesday, August 16, 2023, or later	47	12%
	No Response	55	-
10. Specific to the Evacuation Alert issued for residents in Kam Lake Business District, Grace Lake, and the Engle Business District on August 15, 2023: From whom did you first hear about the Evacuation Alert?	City of Yellowknife	31	7%
	Government of Northwest Territories	15	4%
	Local Media	171	40%
	National/International Media	1	0%
	Other	79	19%
	Personal Contacts / Word of Mouth	111	26%
	Cabin Radio	6	1%
	Other	13	3%
	No Response	36	-

11. Specific to the Evacuation Alert issued for residents in Kam Lake Business District, Grace Lake, and the Engle Business District on August 15, 2023: When you first received information regarding the Evacuation Alert, how did you receive it?	City of Yellowknife Website	5	1%
	Government of Northwest Territories Website	5	1%
	Local News Website	138	32%
	National News Website	2	0%
	Other	76	18%
	Personal Conversation	97	23%
	Radio	17	4%
	Social Media: Facebook	56	13%
	Social Media: Instagram	4	1%
	Social Media: X/Twitter	4	1%
	Television	3	1%
	Cabin Radio	8	2%
	Other	12	3%
	No Response	36	-
12. Specific to the Evacuation Alert issued for residents in Kam Lake Business District, Grace Lake, and the Engle Business District on August 15, 2023: What would have been your preferred communication medium(s) for receiving notifications and updates relating to the Evacuation Alert? (Choose all that apply)	City of Yellowknife Website	88	17%
	Local News Website	112	21%
	National News Website	33	6%
	Television	36	7%
	Radio	84	16%
	Social Media: X/Twitter	22	4%
	Social Media: Facebook	77	15%
	Social Media: Instagram	30	6%
	Social Media: TikTok	9	2%
	Social Media: Other	10	2%
	Cabin Radio	4	1%
	Emergency Alert via text	23	4%
13. Specific to the Evacuation Order issued for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail on August 16, 2023: When did you first hear about the Evacuation Order?	Friday, August 18, 2023	1	0%
	Saturday, August 19, 2023, or later	1	0%
	Thursday, August 17, 2023	10	3%
	Wednesday, August 16, 2023	371	97%
	No Response	80	-
14. Specific to the Evacuation Order issued for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail on August 16, 2023: From whom did you first hear about the Evacuation Order?	City of Yellowknife	14	3%
	Government of the Northwest Territories	49	12%
	Local Media	86	21%
	National/International Media	11	3%
	Personal Contacts/Word of Mouth	169	41%
	Other	80	20%
	No Response	54	-
15. Specific to the Evacuation Order being issued for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail on August 16, 2023: When you first received information regarding the Evacuation	City of Yellowknife Website	1	0%
	Government of the Northwest Territories Website	10	3%
	Local News Website	78	20%
	National News Website	8	2%
	Personal Conversation	181	47%
	Radio	19	5%
	Social Media: Facebook	20	5%

Order, how did you receive it?	Social Media: Instagram	2	1%
	Social Media: Other	2	1%
	Social Media: TikTok	1	0%
	Social Media: X/Twitter	1	0%
	Television	8	2%
	Other	55	14%
	No Response	77	-
16. Specific to the Evacuation Order issued for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail on August 16, 2023: What would have been your preferred communication medium(s) for receiving notifications and updates relating to the Evacuation Order? (Choose all that apply)	City of Yellowknife Website	95	17%
	Local News Website	115	20%
	National News Website	44	8%
	Television	44	8%
	Radio	91	16%
	Social Media: X/Twitter	29	5%
	Social Media: Facebook	73	13%
	Social Media: Instagram	39	7%
	Social Media: TikTok	13	2%
	Social Media: Other	13	2%
17. Specific to the Evacuation Order issued for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail on August 16, 2023: Once you were aware of the Evacuation Order, what information did you have access to? (Choose all that apply)	The status/risk of the wildfire	125	42%
	Appropriate evacuation routes	92	31%
	Evacuation destinations (e.g., Reception Centres)	34	12%
	Emergency support services offered (e.g., lodging, supplies)	13	4%
	Mental health support services	5	2%
	Services/considerations relevant to pets/animals	12	4%
	How you/your family/your organization can support emergency response efforts	14	5%
	Other	13	2%
18. Specific to the Evacuation Order issued for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail on August 16, 2023: Once you were aware of the Evacuation Order, what information did you need but did NOT have access to? (Choose all that apply)	The status/risk of the wildfire	44	7%
	Appropriate evacuation routes	45	7%
	Evacuation destinations (e.g., Reception Centres)	120	20%
	Emergency support services offered (e.g., lodging, supplies)	134	22%
	Mental health support services	85	14%
	Services/considerations relevant to pets/animals	88	15%
	How you/your family/your organization can support emergency response efforts	90	15%
	Other	29	-
19. Specific to the Evacuation Order issued for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail on August 16, 2023: How many hours after learning about the Evacuation Order did you/your family evacuate?	Less than 5 hours	187	49%
	5-15 hours	58	15%
	15-24 hours	52	14%
	24-36 hours	30	8%
	36-72 hours	22	6%
	More than 72 hours	6	2%
	I/we didn't evacuate	27	7%
	No Response	81	-

20. Specific to the Evacuation Order issued for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail on August 16, 2023: If you were under Evacuation Order, did you/your family register as a NWT Evacuee on the GNWT website?	No	51	13%
	Yes	332	87%
	No Response	80	-
21. During the evacuation process for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail from August 16, 2023, onwards: If you/your family evacuated, did you visit a government-organized Reception Centre?	No	199	52%
	Yes	184	48%
	No Response	80	-
22. During the evacuation process for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail from August 16, 2023, onwards: If you/your family evacuated, what mode of transportation did you use to evacuate?	Government-organized evacuation flight	6	2%
	I/we didn't evacuate	16	4%
	Personal flight	33	9%
	Personal ground transportation	292	76%
	Public transportation	1	0%
	Other	35	9%
	No Response	80	-
23. During the evacuation process for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail from August 16, 2023, onwards: If you/your family evacuated, where did you evacuate to?	Government-organized accommodations	56	15%
	I/we didn't evacuate	16	4%
	Secondary home	4	1%
	To stay with friends/family	198	52%
	Other	109	28%
	No Response	80	-
24. During the evacuation process for residents in Yellowknife, Ndilo, Dettah, and the Ingraham Trail from August 16, 2023, onwards: How would you rate the extent and effectiveness of information you received regarding the evacuation, procedures, and access to services?	Very High	5	1%
	High	23	6%
	Moderate	84	22%
	Low	109	28%
	Very Low	162	42%
	No Response	80	-

*Percentages calculated based on number of respondents (i.e., non-responses excluded)

Recovery			
Questions	Options	Number of Responses	%*
25 Specific to the August 16, 2023, Evacuation Order being rescinded: What information did you have access to that supported your return home?	Safety/risk information specific to re-entry	93	39%
	The services that were available during and following re-entry	69	29%
	The assessment of damage to your personal property	12	5%

	The assessment of damage across the impacted area	28	12%
	None	8	3%
	Other	28	12%
	No Response	225	-
26. Specific to the August 16, 2023, Evacuation Order being rescinded: What information did you need to support your return home but did NOT have access to? (Choose all that apply)	Safety/risk information specific to re-entry	49	18%
	The services that were available during and following re-entry	67	24%
	The assessment of damage to your personal property	48	17%
	The assessment of damage across the impacted area	66	24%
	None	14	5%
	Other	35	13%
27. Following re-entry from the August 16, 2023, Evacuation Order being rescinded, what information/resources did you require but NOT have access to in order to support your personal/family's recovery and/or the recovery of the broader community? (Choose all that apply)	Information relating to insurance claims	66	23%
	Disruptions/damage to infrastructure & anticipated restoration timelines	77	27%
	Mental health supports	62	21%
	Pet/animal retrieval information	16	6%
	Had adequate information	34	12%
	Other	34	12%
28. Following re-entry from the August 16, 2023, Evacuation Order being rescinded, what information/resources helped your personal/family's recovery and/or the recovery of the broader community? (Choose all that apply)	Information relating to insurance claims	26	19%
	Disruptions/damage to local infrastructure and anticipated restoration timelines	33	24%
	Mental health supports	19	14%
	Pet/animal retrieval information	2	1%
	None	23	17%
	Other	36	26%

*Percentages calculated based on number of respondents (i.e., non-responses excluded)

Assessment of Preparedness/Mitigation, Response, and Re-Entry/Recovery			
Questions	Options	Number of Responses	%*
29. Given the extraordinary and challenging circumstances relating to the 2023 wildfire season, how would you rate the City and its staff in mitigating and preparing for wildfires?	Excellent	6	2%
	Good	26	7%
	Moderate	62	17%
	Poor	93	26%
	Very Poor	168	47%
	No Response	108	-
30. Given the extraordinary and challenging circumstances that let up to and followed the August 16, 2023, Evacuation Order, how would you rate the City and its staff in implementing the re-entry and recovery process?	Excellent	12	3%
	Good	55	15%
	Moderate	117	32%
	Poor	97	27%
	Very Poor	81	22%
	No Response	101	-

*Percentages calculated based on number of respondents (i.e., non-responses excluded)

Appendix D: Standards and Leading Practices

The following standards were utilized as part of the analysis for this assessment.

UNITED NATIONS SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION

The United Nations Sendai Framework for Disaster Risk Reduction (the “Sendai Framework”) was released in 2015 and has been adopted by the Canadian federal government and provinces like British Columbia. It is a 15-year, voluntary, non-binding agreement which recognizes that while federal and provincial governments have a primary role to reduce disaster risk, responsibility should be shared with local government, the private sector, and other stakeholders. The Sendai Framework aims to achieve the following outcome: *The substantial reduction of disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural, and environmental assets of persons, businesses, communities, and countries.*

The Sendai Framework for Disaster Risk Reduction is an international standard that promotes an all-of-society approach for reducing disaster risk. Although governments have the overall responsibility for reducing disaster risks, it is a shared responsibility with stakeholders and communities. Therefore, an all-of-society approach indicates that engagement of communities and stakeholders is required at all stages of disaster risk reduction. This approach is also being implemented within the Northwest Territories.

The Framework identifies four priorities for action and a set of considerations for implementation of each.

Priority 1 | Understanding disaster risk

What it means to local governments:	Examples of what local governments should do, include:
<p>Local governments need to understand the disaster risks, relative to their community. This includes understanding and documenting vulnerabilities, capacity to address disasters, how impacted their assets and residents are by disasters, what hazards exist and the environment that they are located within. This knowledge should then be used to support risk assessments, prevention, mitigation, preparedness and response planning and efforts.</p>	<ul style="list-style-type: none"> • Collect, analyze, and use data and other sources of information to understand their disaster risks. • Communicate information regarding disaster risks to the public. • Build knowledge of disaster risks by working in collaboration and partnership with other levels of government and other stakeholders. • Incorporate education about disaster risks in formal and informal ways. • Develop and implement policies which support the reduction of disaster risks.

Priority 2 | Strengthening disaster risk governance to manage disaster risk

What it means to local governments:	Examples of what local governments should do, include:
<p>Local governments need to establish formal governance for disaster risk management. As part of this, governance needs to encourage collaboration and partnership with others.</p>	<ul style="list-style-type: none"> • Develop and implement strategies and plans that reduce disaster risks and create resiliency. • Define and encourage participation of the public and private sectors in addressing disaster risks.

	<ul style="list-style-type: none"> • Monitor compliance with mechanisms and incentives of safety-enhancing bylaws and policies.
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Priority 3 | Investing in disaster risk reduction for resilience

What it means to local governments:	Examples of what local governments should do, include:
<p><i>Local governments need to make targeted investments, leveraging public and private sector funding, in disaster risk prevention and reduction to enhance their resiliency.</i></p>	<ul style="list-style-type: none"> • Allocate the necessary resources to implement disaster risk strategies and plans. • Explore opportunities to transfer and / or share disaster risks with partners. • Implement sustainable and risk reducing land use and development policies.

Priority 4 | Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction

What it means to local governments:	Examples of what local governments should do, include:
<p><i>Local governments need to spend dedicated effort on strengthening their preparedness for disaster responses and be prepared for recovery at all levels of the organization. This includes the planning for future disaster risk reduction during recovery efforts.</i></p>	<ul style="list-style-type: none"> • Develop recovery plans with a build back better philosophy. • Plan for the continuity of operations, including social and economic recovery. • Promote regular emergency exercises and preparedness internally and externally. • Guide redevelopment and reconstruction in a way that reduces future disaster risks.

CANADIAN STANDARDS ASSOCIATION Z1600-17

The Canadian Standards Association's Emergency and Continuity Management Program (CSA Z1600:17 (R2022)), identifies a set of requirements for continual improvement processes to develop, implement, maintain, and evaluate an emergency and continuity management program that addresses the functions of prevention and mitigation, preparedness, response, and recovery. First established in 2007, the standard has since been renewed and refreshed to incorporate additional leading practices. The third and most recent edition of the CSA Z1600:17 (R2022) was released in 2017 and reaffirmed in 2022 and supersedes all previous editions.

The CSA Z1600:17 (R2022) is structured in the continual improvement model of “Plan-Do-Check-Act”, focusing on four areas: Program Management and Planning, Implementation, Program Evaluation, and Management Review.

- **Program management and planning** – sets the foundation for a municipality's emergency and continuity management program, as well as the planning process to establish specific requirements and develop emergency and continuity management strategies. Roles and responsibilities are defined and reflect the structure of the municipal organization.
- **Implementation** – executes the plans and strategies developed by the municipalities to prevent & mitigate, prepare for, respond to, and recover from an emergency event.

- **Program Evaluation** – helps a municipality to assess and continually improve its emergency and continuity management program.
- **Management Review** – helps a municipality to sustain its emergency and continuity management program by engaging senior leaders.

NATIONAL GUIDE FOR WILDLAND-URBAN INTERFACE (WUI) FIRES

The National Guide for Wildland-Urban Interface (WUI) Fires aims to mitigate the growing risk of damage and loss due to WUI fires by improving the resilience of buildings, infrastructure, and communities to wildfire. The Wildland Urban Interface refers to areas where houses and manmade developments meet or mix with wildland vegetation. Wildfires present risk of significant losses and substantial evacuations when targeting such areas. The guide's 196 pages draw on recent research, existing codes, standards, guidelines, and insights, to provide support for diminishing risk in the WUI areas of Canada. It is intended for a variety of users, from local governments and authorities, planners and emergency managers to developers, insurers, and individual property owners. It includes information on:

- Hazard and exposure assessment
- Vegetation management and construction measures
- Community planning and resources
- Emergency planning and outreach

INCIDENT COMMAND SYSTEM

The Incident Command System (ICS) is a globally accepted leading practice in emergency management. It is key to understanding how the City responded to the 2023 wildfires. The ICS is a standardized on-site management system used to enable effective, efficient incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. It provides the framework for standard incident management response and improves interoperability between all response organizations as well as with international cooperators. The framework is customizable to the event at hand, designed to adapt to specificities and changing circumstances.⁷⁰

The ICS has three primary purposes during an emergency:

- To provide for the orderly and predictable division of labour.
- To provide for overall safety at the incident or event level.
- To make sure that the work at the incident or event is performed efficiently and effectively.

The ICS consists of the following principles and features:

- **Common terminology:** common terms to enable multiple organizations to work together across all incident management functions and disaster scenarios.
- **Modular organization:** a flexible organizational structure that can integrate various roles and responsibilities within the command structure, depending on the complexity of the disaster.
- **Management by objective:** the response organization functions and operates in accordance with clearly established incident objectives.
- **Incident action planning:** all response activities are guided by coordinated incident action plans that provide incident priorities, objectives, strategies, and tactics.

⁷⁰ ICS Canada. "Incident Command System Canada." https://icscanada.ca/wp-content/uploads/2023/11/ICS-OPS-Description2012_2.pdf#:~:text=ICS%20has%20three%20primary%20purposes%3A%20to%20provide%20for,incident%20or%20event%20is%20performed%20efficiently%20and%20effectively

- **Manageable span of control:** supervisors are able to adequately supervise and coordinate their subordinates.
- **Incident facilities and location:** the right operational support facilities are established in the right area, including incident command posts, bases, camps, staging areas, mass casualty triage areas, point-of-distribution sites as required.
- **Comprehensive resource management:** provides a current, accurate picture of personnel, teams, equipment, supplies, facilities, and other resources that are assigned or available for allocation.
- **Integrated communications:** addresses use of a common communications plan and interoperable communications processes.
- **Establishment and transfer of command:** command should be established from the beginning of the incident, and the agency with primary jurisdictional authority over the incident designates the individual at the scene responsible for establishing command.
- **Chain and unity of command:** there is an orderly line of authority within the ranks of the response organization, and all individuals have a designated supervisor to whom they report at the scene of the incident.
- **Unified command:** allows organizations and agencies with different legal, geographic, and functional authorities to work together without affecting individual agency authority, responsibility, or accountability.
- **Personnel accountability:** accountability of resources at all jurisdictional levels and within individual functional areas, including adherence to check-in / check-out, incident action planning, unity of command, personal responsibility, and span of control.
- **Dispatch / deployment:** rules regarding resource deployment only when requested or when dispatched by an appropriate authority.
- **Information and intelligence management:** includes processes to gather, analyze, assess, share, and manage incident-related information and intelligence.

The proper application and use of ICS provides the necessary structures, processes, and capabilities to guide a response where numerous partners are involved in responding to emergency incidents. The ICS also provides additional guidance on incident command, which is responsible for the overall management of the incident.

Incident Command

Incident command has two aspects. Firstly, command occurs either through a single incident commander (IC) or, if multiple jurisdictions are involved in the incident, unified command (UC). Secondly, command staff report to the IC/UC, and consist of the following:

- **Liaison Officer:** the incident command's point of contact for representatives of other governmental departments and agencies, non-government organizations, and / or private sector to provide input into incident-related matters, including organizational policies and incident-related matters. Representatives from assisting or cooperating organizations should coordinate through the Liaison Officer.
- **Safety Officer:** monitors incident operations and advises incident command on all matters relating to operational safety, including the health and safety of first responders. The Safety Officer is responsible for developing the Incident Safety Plan and has emergency authority to stop and / or prevent unsafe acts during incident operations.

- **Information Officer:** responsible for interacting with the public and media and handling all incident-related information requests from other agencies.

General Staff and Functional Sections

General staff are responsible for the functional sections of incident command, as set out below. The Sections Chiefs may require one or more deputies:

- **Operations Section:** responsible for all tactical activities focused on reducing the immediate hazard, saving lives and property, establishing situational control, and restoring normal operations.
- **Planning Section:** collects, evaluates, and disseminates incident situation information and intelligence to incident command and management personnel. Prepares reports, maintains resource status, and prepares Incident Action Plans, based on input from the operations section.
- **Logistics Section:** responsible for all service support requirements for facilitating effective and efficient incident management, including requesting resources from external partners.
- **Finance and Administration:** established when activities require on-scene or incident-specific finance and other administrative support, including personnel time, vendor contracts, compensation and claims, and cost analysis for the incident.
- **Intelligence and Investigative Function:** responsible for a system for the collection, analysis, and sharing of information developed from intelligence / investigation activities. This function can be embedded in other sections within the organizational structures, while other times, it can be added as an additional functional area.

BRITISH COLUMBIA EMERGENCY MANAGEMENT SYSTEM

The British Columbia Emergency Management System (BCEMS) is a comprehensive framework that helps ensure a coordinated and organized approach to emergencies and disasters. It is intended to:

- Provide a structure for a standardized approach to developing, coordinating, and implementing emergency management programs across the province;
- Establish guiding principles, processes, and a common terminology, thus enabling a range of stakeholders to participate in all phases of emergency management; and
- Emphasize integration and partnerships that facilitate communication and coordination on all levels.

Although this system was developed in the context of British Columbia, the similar usage of ICS as the NWT Emergency Management makes it a useful source of information for leading practices in Canada.

Appendix E: Key Concepts

Disaster risk management, emergency management and business continuity are related processes which help a community prevent, prepare for, and respond to a disaster.

- **Disaster risk management** intends to understand the risks of disasters to a community and prevent new disaster risks, reduce existing risks, and strengthen resiliency.
- **Emergency management** seeks to prevent and mitigate, prepare for, respond to, and recover from incidents, while safeguarding people from harm when disasters occur.
- **Continuity management** is an integrated process involving the development and implementation of activities that provides for the continuation and/or recovery of critical service delivery and business operations in the event of a disruption.

Despite the differences between these functions, each are needed to help ensure the success of a Local Authority during and following a disaster. This report discusses each of the three elements, analyzing them in relation to the City's current practices and in relation to their response and recovery from the 2023 wildfire season.

DISASTER RISK MANAGEMENT

As per the United Nations Sendai Framework for Risk Reduction, disaster risk management is based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment. It is intended to prevent new disaster risks, reduce existing risks, and strengthen the resilience of a community.

Disaster risk management involves the development and implementation of policies and strategies that help a community prevent new disaster risks, reduce known disaster risks, and manage the remaining risks. This contributes to the strengthening of the community's overall resilience and reduces losses from a disaster. Resiliency may also be addressed following a disaster when the community is built back better to address and withstand future disaster risks.

Activities can include conducting hazard assessments, maintaining a disaster risk register, planning for, and taking actions to reduce potential disaster risks (either through proactive investments or by addressing known gaps or challenges in the community), and ongoing collaboration and partnerships.

EMERGENCY MANAGEMENT

As per the Canadian Standards Association Z1600-17 Standard, emergency management is an ongoing process to prevent, mitigate, prepare for, respond to, and recover from an incident.

Emergency management exists as procedures and actions that are taken immediately after a disaster occurs to address the impact of the event. It often involves holding emergency drills and training sessions for preparedness, directing people and resources away from danger, evacuation of affected areas, and working with first responders to ensure the safety of all stakeholders.

Emergency preparedness, a subset of emergency management, includes assessing all the possible incidents that could affect a municipality, such as fire, severe weather, flooding, hazardous waste spills etc. Preparedness means holding regular exercises to ensure that the entire municipality is aware of these threats and knows what to do in case of an emergency. This also includes effectively distributing a municipality's emergency response plans, contact lists and other key documents to municipal employees and other stakeholders.

BUSINESS CONTINUITY



As per the Canadian Standards Association Z1600-17 Standard, continuity management is an integrated process involving the development and implementation of activities that provide for the continuation and / or recovery of critical service delivery and business operations in the event of a disruption.

Business continuity takes steps to maintain or restore the municipal organization to its pre-disaster state. It involves establishing and maintaining redundant systems and support teams, restoring IT systems, and ensuring municipal employees are able to return to their daily work tasks following an emergency.

Those involved in business continuity develop plans to avoid potential business-disrupting problems. Typically, business continuity plans are not distributed across an entire municipality, but rather to key stakeholders who would be involved in business continuity efforts. This might include the Senior Leadership Team, Directors, IT, Communications, HR, and other related groups.

Appendix F: Legislation, Regulations, and Emergency Management Plans

The City's Emergency Management approach is guided by key legislation and regulations.

NORTHWEST TERRITORIES EMERGENCY MANAGEMENT ACT

The *Emergency Management Act* provides the overarching legislative framework for emergency management in the NWT. It requires and informs the development and implementation of both Territorial and Community Emergency Plans and programs. The Act also outlines the roles, responsibilities and powers of the Minister, Emergency Operations Organization (EMO) and community governments in preparing for and responding to emergencies.

The Act outlines:

- Powers and duties of the Minister, the Northwest Territories EMO, and Local Authorities
- Establishment of EMO (head of EMO, powers, and duties)
- Establishment of Territorial Planning Committee
- Requirements for Territorial and Local Emergency Plans
- Declaration of States of Emergency (Local and Territorial)
- Miscellaneous details including Compensation, Liability, Offences & Penalties and Conflicts

2024 NORTHWEST TERRITORIES EMERGENCY PLAN

The Northwest Territories Emergency Plan establishes a coordination and planning framework for emergencies that may affect all or part of the Northwest Territories, under the authority of the *Emergency Management Act*. The Plan outlines how emergency management partners (all levels of government, critical infrastructure providers, non-government organizations, the private sector, and Indigenous governments) work together to respond to widespread, large scale and complex emergencies, ultimately helping to ensure the safety and security of residents and visitors. The Plan also outlines the use of the ICS as a response model and provides guidance on community evacuations and Emergency Communication. The Northwest Territories Emergency Plan includes:

- A description of the Northwest Territories emergency management system.
- A framework for relationships with other departments, governments, and non-government agencies in preparing for and responding to emergencies.
- Procedures for the coordination of responses to territorial emergencies and for the support of Local Authorities during emergencies when their capacity has been exceeded and assistance has been requested.

The Plan identifies eight emergency response priorities that guide all decision making throughout any response. These priorities are in line with global best practice:

1. Provide for the safety and health of all responders
2. Save lives
3. Reduce suffering
4. Protect public health
5. Protect critical infrastructure
6. Protect property
7. Protect the environment
8. Reduce economic and social losses

In April 2024, the GNWT updated the previous Emergency Plan to include changes to the document format and the locations where information can be found in the document. Text has been added to provide clarity and fully articulate roles and responsibilities. The updated Plan also:

- Revises language to better reflect the purpose of the Plan, which is to establish a coordination and planning framework for emergencies and outline how emergency management partners work together.
- Clarifies roles and responsibilities for Local Authorities as leaders of emergency management and response coordination. Clarifies how Indigenous governments, non-government organizations, and the GNWT can support.
- Clarifies the GNWT department and agency specific roles and responsibilities in supporting community governments when their capacity has been exceeded.
- The Evacuation and Hosting Guidelines annex was revised to clearly state what response and hosting costs community governments can seek GNWT reimbursement for in the event the Disaster Assistance Policy is applied to a disaster event. This is in response to requests from community governments for greater clarity and more information.
- The Emergency Communications Protocol annex was revised to better articulate the GNWT's approach to emergency related communications and outlines the tactics that will be used to communicate emergency related information to the public.

CITY OF YELLOWKNIFE EMERGENCY MANAGEMENT BYLAW

The City's Emergency Management By-law establishes an Emergency Management Organization (EMO) for the city of Yellowknife. The EMO is comprised of the SAO, the Director of Public Safety, the Manager of Emergency Management, the Fire Chief, and members of the City's Senior Management team designated by the SAO. The members of the EMO of the City shall assist the Local Coordinator in the development and implementation of a local emergency plan and the establishment of other measures in respect to emergency management.

The by-law appoints the SAO as the Local Coordinator of the City, outlining their duties and responsibilities as follows:

- Develop, coordinate, and implement an Emergency Management Plan for the City.
- Test the Emergency Management Plan in cooperation with City Departments and outside agencies.
- Ensure that the Emergency Management Plan is reviewed annually.
- Develop information to educate the public on preparing for and dealing with emergencies.

The Council delegates to the Local Coordinator all of its powers and duties as the local authority under the Emergency Management Act, except for the authority to make a declaration of a state of local emergency.

CITY OF YELLOWKNIFE EMERGENCY RESPONSE AND FIRE PROTECTION SERVICES BYLAW

The City's Emergency Response and Fire Protection Services Bylaw outlines the appointment of the Deputy Fire Chief(s), and their powers and duties, which are as follows:

- Fire protection
- Emergency Medical Services
- Rescue Services
- Hazmat Services



Additionally, the bylaw includes an Exclusive Provision of Ambulance Services section, an Emergency Response Jurisdiction as well as Prohibitions. Permitted Fires, Fire Pits, Fees, Property Entry and Inspections, Penalties, Fines and Tickets are also addressed.

CITY OF YELLOWKNIFE EMERGENCY PLAN

The City of Yellowknife Emergency Management Plan (the “Emergency Management Plan”) enhances the coordination of resources to mitigate, respond to and recover from major emergencies or disasters. The plan follows an all-hazards approach with a wide scope to allow a flexible response to any emergency. The Emergency Management Plan is in the process of being updated, as part of the annual review and validation, and to align with the 2024 Northwest Territories Emergency Plan. The Plan helps establish a plan of action for the efficient deployment of resources and/or services required for a prompt coordinated response to an emergency or threat. It will also help minimize risks to the health and safety of City residents, and damage or loss of property.

Appendix G: Northwest Territories Emergency Management System

The Northwest Territories emergency management system is comprised of a series of escalating responsibilities from the “bottom-up”, with the intent of resolving an emergency at the lowest possible level. During an emergency, each higher level of the response will monitor the situation and take the necessary measures to assist and support those immediately engaged in response and prepare for direct involvement if required.

Although not explicitly addressed within the Northwest Territories Emergency Management System, the Sendai Framework for Disaster Risk Reduction is an international best practice that promotes an all-of-society approach for reducing disaster risk. Although governments have the overall responsibility for reducing disaster risks, it is a shared responsibility with stakeholders and communities. Therefore, an all-of-society approach indicates that engagement of communities and stakeholders is required at all stages of disaster risk reduction. This approach is also being implemented within the Northwest Territories.

The emergency management system includes those elements and entities required for effective emergency management, including legislative, regulatory, and policy frameworks, emergency plans, and emergency management partners. Emergency management begins with individual and private sector responsibilities for safety and security, and escalates to Local Authorities, regions, and the territorial government as capacity is exceeded and further assistance is required.

The Northwest Territories response structure is established for application in all local authorities. This emergency management system ensures a coordinated and organized response to all emergencies and disasters. The Northwest Territories utilizes the Incident Command System (ICS), which is designed to provide a common organizational and response structure between partner agencies. The ICS is a model for command, control and coordination of emergency response and provides a way of coordinating the efforts of agencies and resources toward safely responding, controlling, and mitigating any type of emergency incident.

As shown in the figure to the right, the Northwest Territory Emergency Management Systems utilizes an escalation of emergency management responsibilities starting with individuals, then the Local Emergency Management Organizations (enacted by the City through the Emergency Operations Centre), then the Regional Emergency Management Organization (REMO), the Territorial Emergency Management Organization (TEMO), then the federal government.

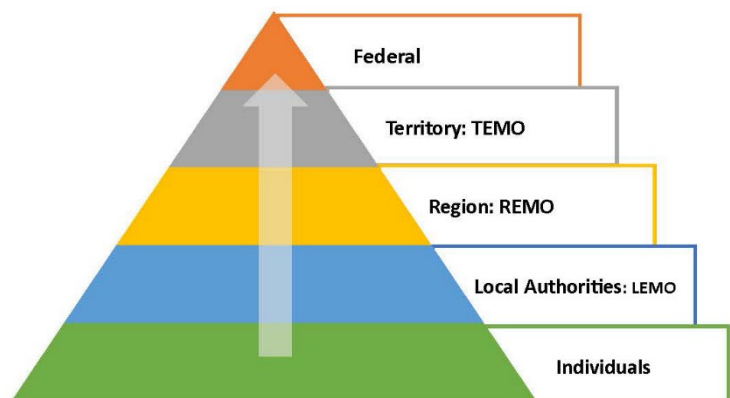


Figure 7: Emergency Management Response Structure

CITY OF YELLOWKNIFE EMERGENCY OPERATIONS CENTRE (EOC)

In the event of a major emergency or disaster, the City would activate its Emergency Operations Centre (EOC), where critical City staff and representatives from partner organizations work together to carry out the planning and operations involved in managing an emergency.

The EOC is responsible for:

- Capturing and centralizing information about the major emergency or disaster.
- Providing policy direction for coordinating and supporting on-the-ground responders.
- Providing a structure to identify critical needs, and to establish major emergency or disaster response priorities.
- Determining how to effectively use available resources and requesting resources from the territorial government if necessary.
- Providing the public with clear direction and updates from the beginning to the end of the emergency, ensuring the community has the information they need to make educated decisions.
- Managing the transition from response to recovery and communicating short and long-term recovery goals to the public.

TERRITORIAL EMERGENCY MANAGEMENT ORGANIZATION

The Northwest Territories Emergency Management Organization consists of the Territorial Emergency Management Organization (TEMO) situated within the department of the MACA Emergency Management Division. It includes five Regional Emergency Management Organizations (REMOs) situated in MACA regional offices, which are led by MACA Regional Superintendents.

The GNWT is responsible for the Territorial Emergency Management Office (TEMO). The TEMO may be activated to support the response to emergencies within the territory. It will coordinate overall territorial response activities, ensure communications with appropriate partners, provide regular situational reports, and coordinate the involvement of other departments and key stakeholders.

The North Slave Regional EMO (REMO) is responsible for the Regional Emergency Operation Centre (REMO). The REMO may be activated to monitor a risk situation, to respond to a request for assistance from a community, or to support a territorial emergency response. The MACA Regional Superintendent, as the Incident Manager, may assign an Incident Management Team to provide community liaison, operational support, and situational awareness to the REMO. The REMO provides overall coordination of a regional response and timely support to communities needing assistance.

Appendix H: Glossary of Terms

The following terms are used throughout the report:

All-Hazards – describes an incident that warrants action to protect life, property, environment, and public health or safety, and to minimize disruptions of government, social, or economic activities.

All-of-Society approach: The Sendai Framework for Disaster Risk Reduction establishes the conditions for an all-of-society approach for reducing disaster risk. Although governments have the overall responsibility for reducing disaster risks, it is a shared responsibility with stakeholders and communities. Therefore, an all-of-society approach indicates that engagement of communities and stakeholders is required at all stages of disaster risk reduction.

Build Back Better: The use of the recovery, rehabilitation, and reconstruction phases after a disaster to increase the resilience of communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies, and the environment.

Business Continuity – activities performed by an organization to ensure that critical business functions will be available to stakeholders and the public should a disruption occur. The written version is a Business Continuity Plan.

Canada Task Force 2 (CAN-TF2) - a division of the Calgary Emergency Management Agency, is an all-hazards disaster response team with incident management capabilities to respond to emergencies and disasters throughout Canada.

Communications – the process of transmission of information through verbal, written, or electronic means.

Coordination – the integration of multi-agency efforts and available capabilities, which may be interdependent, in order to achieve defined objectives.

Critical Infrastructure – assets, systems, and networks vital to a city. Their incapacitation or destruction would have a debilitating effect on the economy, environment, public health or safety, or any combination thereof. For example, power lines, medical centres, and wastewater services.

Critical Services Workers- employees of organizations that provide services that are critical to the continuity of services within the City. This may include emergency services, utility providers, grocery stores, pharmacies, health service providers, transportation services, airport workers, and banking services.

Department of Health and Social Services (DHSS) – The DHSS is a department under the GNWT that promotes, protects, and provides for the health and wellbeing of the Northwest Territories. They perform critical activities to support emergency response and business continuity. These include executing the department emergency response plan, which could involve evacuating health facilities and moving patients to safe areas.

Disaster – an event that results in serious harm to the safety, health, or welfare of people or in widespread damage to property.

Emergency – an event that requires prompt coordination of action or special regulation of persons or property to protect the safety, health, or welfare of people or to limit damage to property.

Emergency Management – the management of emergencies concerning all-hazards, including all activities and risk management measures related to prevention, preparedness, response, stabilization, and recovery.

Emergency Management Organization (EMO) – established under the *Emergency Management Act*, the EMO is the custodian of the Government of the Northwest Territories' Emergency Plan.

Emergency Operations Centre (EOC) – the physical location at which the coordination of information and resources to support incident management (on-scene operations) activities normally takes place.

Emergency Social Services (ESS) – a planned emergency response program intended to meet the immediate and long-term survival and psychological needs of individuals impacted by an emergency or disaster.

Environment and Climate Change (ECC) – the department of the GNWT responsible for coordinating environmental policies and programs, as well as preserving and enhancing the natural environment and renewable resources. The ECC provides wildfire expertise through wildfire forecasting, tracking and live updates.

Evacuation – instruction or movement of community members out of a defined area given an immediate threat to life and property.

Evacuation Alert – An Evacuation Alert is issued to advise residents of the potential for loss of life or property from an emergency event and to be prepared to evacuate on short notice. Officials need to make every effort to provide as much advance notice as possible.

Evacuation Order – An Evacuation Order is issued to advise of the need to evacuate the area due to imminent danger. An Evacuation Order can be issued with or without declaring a state of emergency; however, can only be enforced if a state of emergency is declared.

Evacuation plan: pre-identified and agreed upon operating procedures, responsibilities, and resources, usually recorded and shared in written form, to facilitate and organize the timely and coordinated actions of all relevant stakeholders in case an emergency evacuation should become necessary.

Evacuee: person who has evacuated a hazardous location in response to the threat of an emergency, either through their own initiative and resources (self-evacuated) or through the direction and assistance of authorities or emergency responders

Firebreak – barrier to fire spread built by clearing or significantly thinning fuels on a strip of strategically located land.

FireSmart – a national program adopted in communities across Canada aimed at reducing the risk of wildfire to homes and neighbourhoods.

Government of the Northwest Territories (GNWT) – the Northwest Territories is a northern federal territory of Canada. It has a population of about 41 000 people and its departments and agencies are responsible for providing coordination and support for emergencies that fall within their specific departmental or agency mandates and for supporting territorial level responses in accordance with this Plan. GNWT departments support Local Authorities in the event of an evacuation where the Local Authority's capacity has been exceeded in whole or in part when responding to an emergency.

Hazard – potentially damaging physical event, phenomenon, or human activity that could cause the loss of life or injury, property damage, social and economic disruption, or environmental degradation.

Incident – occurrence, either caused by humans or natural phenomena that requires a response to prevent or minimize loss of life or damage to property and/or the environment. Incidents can, for example, include major disasters, emergencies, wildland and urban fires, floods, etc.

Incident Command – the Incident Command System organizational element responsible for overall management of the incident and consisting of the Incident Commander (either single or unified command structure) and any assigned supporting staff.

Incident Command System (ICS) – a standardized on-scene emergency management system specifically designed to provide an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.

Incident Management – the broad spectrum of activities and organizations providing effective and efficient operations, coordination, and support applied at all levels of government, utilizing both governmental and nongovernmental resources to plan for, respond to, and recover from an incident, regardless of cause, size, or complexity.

Information Management – the collection and management of information from one or more sources and the distribution of that information to one or more audiences.

Logistics – the process and procedure for providing resources and other services to support incident management.

Municipal and Community Affairs (MACA) – the Department of Municipal and Community Affairs (MACA) works through the Emergency Management Division of the GNWT. It is responsible for identifying overall communication needs when it comes to emergency response. MACA is required to have established communications-planning documents, to coordinate territorial emergency management training, to maintain an updated territory-wide Hazard Identification Risk Assessment, to maintain backup telecommunications equipment, and more.

Mitigation & Preparedness Phase – the Mitigation phase occurs before the emergency, encompassing both the strategies and activities undertaken prior to emergencies, as well as efforts to reduce the risk of wildfires and other hazards. The Preparedness phase involves creating emergency management plans, establishing mutual assistance agreements, maintaining resource inventories and equipment, and conducting training and emergency exercises.

The Municipal Corporation of the City of Yellowknife (the City)- plays a significant role in disaster risk management within the Northwest Territories, responsible for developing and implementing emergency plans to reasonably protect the general public and minimize property damage or loss during emergencies.

Recovery Phase – the final stage of an emergency response, during which municipalities work to repair and restore conditions. This could include stabilizing conditions for the return of evacuees, providing counselling support, carrying out reconstruction, conducting economic impact studies, or

offering financial assistance. This phase could also involve the continuous improvement of prevention and mitigation measures to further reduce future disaster risk.

Recovery Plan – a plan developed to restore an affected area or community.

Re-entry – the systematic return of individuals back to the emergency-affected area based on direction of local authorities.

Regional Emergency Management Organization (REMO)- REMO membership consists of GNWT departments and agencies and relevant outside agencies such as critical infrastructure or service providers. The REMO provides overall coordination of a regional response and timely support to communities needing assistance. Should the capacity of the REMO be exhausted, they may request assistance from another REMO or from the TEMO.

Resident – a person who resides within the city of Yellowknife.

Resources – all the assets, people, skills, information, technology, premises, and supplies and information that an organization has to have available to use, when needed, in order to operate and meets its objectives.

Response Phase – involves managing the consequences of the event through emergency response, communication, evacuation, search and rescue, emergency medical assistance, and the delivery of emergency social supports. The primary objectives are to minimize suffering and loss, to ensure the safety and wellbeing of people, to protect critical infrastructure, buildings, and homes, and to maintain the continuity of critical services.

Risk – the combination of the likelihood and the consequence of a specified hazard being realized; refers to the vulnerability, proximity or exposure to hazards, which affects the likelihood of adverse impact.

Risk assessment – overall process of risk identification, risk analysis, and risk evaluation.

Situational Awareness – being aware and keeping track of what is happening provincially, federally, and internationally. This can be achieved through sharing information on events and agency/ stakeholder actions.

State of Local Emergency (SOLE) –enables local authorities to exercise the emergency response powers listed in the *Emergency Management Act*. The emergency response powers are used by the local authority to take actions such as acquiring or using property, authorizing or requiring a qualified person to render aid, causing the demolition or removal of vegetation, structures, equipment or vehicles, or any other act to mitigate, response to, and recover from the effects of the emergency.

Territorial Emergency Management Organization (TEMO) –TEMO membership consists of GNWT departments and agencies, relevant outside agencies such as critical infrastructure or service providers, and relevant agencies from outside the NWT. TEMO will coordinate overall territorial response, ensure communications with appropriate partners, provide regular situational reports, and coordinate the involvement of other departments and key partners.

Territorial State of Emergency (SOE)- enables the Minister to exercise the emergency response powers listed in the *Emergency Management Action*. The emergency response powers are used by the GNWT to take actions such as requiring a local authority to put into effect emergency plans, acquiring or utilizing property, controlling or prohibiting travel to or from any area within the Northwest Territories, providing for the restoration of essential facilities, causing the evacuation of persons, and authorizing the entry into any building.

Trigger – precursor to a key event, such as initiation of evacuation.

Vulnerability – characteristics and circumstances of a community, system, or asset that make it susceptible to the damaging effects of a hazard, including the propensity to be adversely affected, and the degree to which a socio-economic system is either susceptible or resilient to the impact of natural hazards and related technological and environmental disasters (determined by a combination of several factors, including hazard awareness, the condition of human settlements and infrastructure, public policy and administration, resilience, adaptive capacity, and organized abilities in all fields of disaster management).

Vulnerable Populations- community members that have specific needs that may contribute to their heightened vulnerability in an emergency. This may include people with disabilities, including people with mobility, speech, or developmental challenges, as well as those who are blind, deaf, hard of hearing, or who experience non-visible disabilities. It may also include seniors and Elders, children and youth, people with language barriers or who don't speak the dominant language of communications. Other population groups may include people with specific health concerns and requirements, those who struggle with mental health and addictions, unhoused persons, tourists with limited local networks, low-income individuals and families, and people with safety concerns, such as survivors of abuse, gender-based violence, trauma, and people with Protection Orders.

Wildfire – unplanned or unwanted natural or human-caused fire in live or dead combustible vegetation, as contrasted with a prescribed fire.

Wildfire risk – combination of the likelihood of a wildfire occurring combined with the potential impacts of that fire.

Yellowknives Dene First Nation (YKDFN) – the YKDFN is a self-governing First Nation in the Northwest Territories, Canada, with two major settlements in Dettah and Ndilq. The YKDFN offers programs and services to its members and the public, including education, housing, land management and more. They collaborated with the City during the 2023 wildfire season, producing joint communications.

Appendix I: Acronyms

AAA	After Action Assessment	REMO	Regional Emergency Measures Organization
BCP	Business Continuity Plan	RCMP	Royal Canadian Mounted Police
CAN-TF2	Canada Task Force 2	SOE	State of Emergency
DHSS	The Territorial Department of Health and Social Services	SOLE	State of Local Emergency
ECC	The Territorial Department of Environment and Climate Change	TEMO	Territorial Emergency Management Organization
EOC	Emergency Operations Centre	The City	The Municipal Corporation of the City of Yellowknife
EMO	Emergency Management Organization	YKDFN	Yellowknives Dene First Nation
ESS	Emergency Support Services		
GNWT	Government of the Northwest Territories		
ICS	Incident Command System		
JIC	Joint Information Centre		
MACA	The Territorial Department of Municipal and Community Affairs		



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2023 North Slave Complex Wildfires After Action Assessment:

Final Report

Yellowknife City Council

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July 8, 2024

Disclaimer

This presentation has been prepared by KPMG LLP (“KPMG”) for the City of Yellowknife (“Client”) pursuant to the terms of our engagement agreement with Client dated 2023-12-04 (the “Engagement Agreement”). The contents of this presentation does not represent our conclusive findings, which will only be contained in our final detailed report. KPMG neither warrants nor represents that the information contained in this presentation is accurate, complete, sufficient or appropriate for use by any person or entity other than Client or for any purpose other than set out in the Engagement Agreement. This presentation may not be relied upon by any person or entity other than Client, and KPMG hereby expressly disclaims any and all responsibility or liability to any person or entity other than Client in connection with their use of this presentation.

Agenda

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Project Scope

Project Objectives

- 01** Assess the efficiency and effectiveness of the City's emergency management response and recovery processes, procedures, capabilities and framework in support of the 2023 North Slave Complex Wildfires.
- 02** Identify and document strengths, areas for improvement and gaps in existing preparedness and response capabilities.
- 03** Identify actions that need to be implemented immediately to ensure better preparation for the future, as well as medium to long term actions needed to strengthen and institutionalize the emergency response capabilities.
- 04** Consider, at minimum, the following four questions: 1) What was expected to happen? 2) What actually occurred? 3) What went well and why? 4) What can be improved and how?
- 05** Complete 4 key project deliverables.

Key Deliverables

- 01** **After Action Assessment Report**
Focused on the City's prevention and mitigation, preparedness, response and recovery activities as they relate specifically to the August 2023 North Slave Complex Wildfires. The recommendations from the AAA Report will seek to inform and develop future strategies developed in the City's emergency management and response program related to overall threats as well as to wildfire threats.
- 02** **After Action Work Plan**
Identifies and prioritizes recommended follow-up actions required.
- 03** **Interim Presentation to Yellowknife City Council**
Process and preliminary findings.
- 04** **Final Presentation to Yellowknife City Council**
Findings and recommendations.

Project Timeline

Phase 1: Project Initiation January 2024

Phase 3: Engagement March-April 2024

- Public Forum (March 27)
- Public Survey and email collection (March 25-April 12)
- Meetings with partners and stakeholders (ongoing)

Phase 5: Reporting June-July 2024

- Analysis of documentation and engagement findings
- Development of Final Report and Recommendations
- Final Presentation to City Council (July 8) ★

Phase 2: Documentation Review February- March 2024

- Review of internal and public documentation

Phase 4: Analysis March-May 2024

- Analysis of documentation and engagement findings (ongoing)
- Interim Presentation to City Council (May 13)

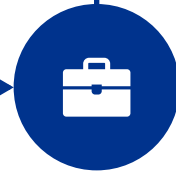
Approach

Approach



Data Collection/Analysis

- Internal/external documentation (plans, documents, emails, communications, etc.)
- Meeting with City EOC personnel
- Interviews with Mayor and Council
- Interviews with 9 key City staff
- 24 partner/stakeholder interviews
- Interview with local media
- Public engagement workshop
- Public survey (463 respondents)
- Email input from the public (43)



Key Findings

- 5 themes
 - Cross-Agency Coordination
 - Public Communications
 - Considerations for Vulnerable Populations
 - EOC and Continuity Management
 - Evacuation Planning, Response, and Recovery
- 19 key strengths
- 35 areas for future improvement



Recommendations

- Key findings analyzed in accordance with leading practices and standards (CSA, ISO, Sendai, WUI)
- 26 recommendations to address areas for future improvement



Prioritization



Approach

Key Findings






- Lack of clarity remains regarding roles and responsibilities between the City and other agencies.
- A full assessment and determination of roles and responsibilities is beyond the scope of this project.
- The Key Findings are based on the roles and responsibilities described in the NWT Emergency Plan publicly available during the 2023 North Slave Complex Wildfires, and the requests for assistance the City submitted to the GNWT.

Key Strengths

Key Strengths

CROSS-AGENCY COORDINATION




ENTITY INVOLVED

 <p>Considerable effort and resources were provided by contractors, and City staff for the installation of firebreaks and sprinklers, with support from volunteers for building firebreaks.</p>	<p>The City</p>
 <p>Interviews indicated that the coordination and communication between the City and the Government of the Northwest Territories (GNWT) Department of Environment and Climate Change (ECC) worked well throughout the wildfire season.</p>	<p>The City & the GNWT</p>
 <p>The City used the State of Local Emergency to re-allocate resources to mitigate risks of the 2023 North Slave Complex Wildfires.</p>	<p>The City</p>
 <p>Integration of representatives of the Yellowknives Dene First Nation (YKDFN) into the City Emergency Operations Centre (EOC) contributed to excellent coordination of response efforts and communications.</p>	<p>The City & YKDFN</p>
 <p>The City and YKDFN issued a joint Road to Re-Entry Plan and informed residents of the key dates for re-entry.</p>	<p>The City & YKDFN</p>

Key Strengths

PUBLIC COMMUNICATIONS




ENTITY INVOLVED

	The City provided some updates on measures being taken for community protection, including building firebreaks and installing sprinklers.	The City
	Regular updates were provided through press conferences livestreamed by the City on their website and by the City Mayor on Facebook.	The City & the GNWT
	Joint communications developed and released by the City and YKDFN.	The City & YKDFN
	Public communication was better coordinated for re-entry in comparison to the evacuation process.	The City & the GNWT
	The City provided residents with information about what to expect when returning to the city of Yellowknife, including specific actions they could take to ensure water and food safety.	The City





Key Strengths

CONSIDERATIONS FOR VULNERABLE POPULATIONS

ENTITY INVOLVED

	Organizations supporting vulnerable populations are key sources of expertise for how to enhance preparedness to ensure all unique needs are met.	Vulnerable population organizations
	Organizations supporting vulnerable populations made substantial contributions in assisting their clients during the evacuation process.	Vulnerable population organizations
	Organizations supporting vulnerable populations contributed significant efforts to support their clients in the recovery and re-entry process.	Vulnerable population organizations

Key Strengths

EMERGENCY OPERATIONS CENTRE AND CONTINUITY MANAGEMENT	ENTITY INVOLVED
 Despite gaps in the Incident Command System (ICS) or EOC training, City staff were able to activate a functional EOC and carry out the basic functions required.	The City
 City staff took initiative and contributed significant effort to supporting continuity of business operations during the emergency event.	The City
 The City identified the appropriate staff to fill key operational roles in the EOC throughout the evacuation.	The City
 Volunteers contributed significant time, effort, and resources to support the implementation of community protection measures.	Volunteers

Key Strengths

EVACUATION PLANNING, RESPONSE & RECOVERY

ENTITY INVOLVED

	The City identified internal capacity issues and made the appropriate requests for assistance from partner agencies.	The City
	The City responded to requests from the public for pet support by working with local animal welfare organizations and developing a clear process for owners to submit requests for pet retrieval and care.	The City & the GNWT

Prioritized Recommendations for Improvement

Recommendations

The following recommendations assume that the responsibility for their implementation rests with the City. This is based on the NWT Emergency Plan which was recently updated in 2024 and includes notable shifts in roles and responsibilities between the GNWT and Local Authorities. It is important to note that the updated NWT Emergency Plan does not include any considerations unique to the City as a Local Authority associated with emergency events. The experiences from the 2023 North Slave Complex wildfires suggests it may be appropriate to consider whether the City is unique from other Local Authorities in the Northwest Territories as it relates to emergency events, particularly as it relates to roles and responsibilities between the City and the GNWT.

The City may make an agreement with the GNWT, or pro-actively submit formal requests for assistance to the GNWT associated with emergency management responsibilities, including any responsibilities associated with the following recommendations, if the City does not have the capacity to fulfill that responsibility. However, for the purposes of this report it is assumed no such agreement is in place, nor any pro-active request for assistance submitted.

Recommendations

CROSS-AGENCY COORDINATION

#	Recommendation
1	Involve partners and stakeholders in emergency planning efforts to ensure a shared understanding of roles and responsibilities and improve future coordination.
2	Coordinate with the GNWT to establish a formal decision-making process for shared responsibilities associated with declarations of states of emergency, Evacuation Notices, Alerts, and Orders, and other response and recovery related activities.
3	Coordinate with the GNWT to ensure a shared understanding and interpretation of the <i>Emergency Management Act</i> , particularly with respect to roles and responsibilities following the declaration of a Territorial State of Emergency by the GNWT.
4	Work with the GNWT to establish a common understanding of roles and responsibilities, including communication and coordination channels, to formalize information sharing and institutionalize the relationship between different government levels.



Recommendations

CROSS-AGENCY COORDINATION

#	Recommendation
5	Coordinate with the GNWT on the designation and management of critical service workers during evacuation scenarios comparable to the 2023 North Slave Complex Wildfires.
6	Continue to partner with YKDFN by inviting one or more representatives to the City EOC during major activations to enhance the coordination of response actions and development and delivery of joint communications.
7	Regularly review and update the City of Yellowknife Community Wildfire Protection Plan (and comparable wildfire risk management documentation) and consider opportunities to coordinate with the GNWT and neighbouring communities on wildfire mitigation and risk reduction measures in advance of wildfire seasons.



Recommendations

PUBLIC COMMUNICATIONS

#	Recommendation
8	Collaborate and coordinate with the GWNT on public communications related to a city-wide evacuation to identify opportunities to align approach, timing, content, and audience prior to the release of information.
9	Develop a strategy for managing public information before, during and after evacuations to ensure that communications to the public are clear, accessible, informative, and timely. This strategy should include templates, draft messaging, guidelines, contact information, and channels for communication with partners and the public. The strategy should also include procedures for the timely issuance of Evacuation Notices, Alerts, and Orders through various communication channels.
10	Prepare and communicate materials to enhance public awareness of the City's wildfire mitigation and preparedness efforts that have been taken, are planned for, or are underway.



Recommendations

CONSIDERATIONS FOR VULNERABLE POPULATIONS

#	Recommendation
11	Consider opportunities to increase the accessibility and reach of information and guidance to support personal preparedness efforts.
12	Consider the needs of vulnerable populations in all evacuation planning, response and recovery activities and implement a system to register these individuals to ensure their safety during evacuation and re-entry. Involve local organizations that support vulnerable populations in the planning efforts.
13	Establish a position within the City EOC that can be activated to coordinate with local organizations supporting vulnerable populations to enhance coordination and communication.
14	Provide advance and direct communications to organizations supporting vulnerable populations when the City is considering issuing an Evacuation Order. This will allow time for preparations to support these populations.



Recommendations

EMERGENCY OPERATIONS CENTRE AND CONTINUITY MANAGEMENT

#	Recommendation
15	<p>Develop an emergency management training plan for City staff that includes:</p> <ul style="list-style-type: none">• the frequency and scope of training;• ICS training for all City staff that may serve in roles within and/or in support of the City's EOC;• enhanced ICS Training (e.g., ICS 300 and ICS 400) for City staff that may serve in leadership roles within the City's Emergency Operations Centre (EOC) (E.g., Incident Command / EOC Director, Liaison Officer, Information Officer, Section Leads, etc.); and,• an ongoing record of training completed.
16	<p>Establish clear documentation processes to manage information, including templates, tracking documents, clear internal communication channels for the sharing of information, and documentation filing approaches.</p>
17	<p>Review and consider revisions to City EOC documentation based on lessons observed during the 2023 activation, including documentation guiding the activation of the EOC and position-specific procedures.</p>



Recommendations

EMERGENCY OPERATIONS CENTRE AND CONTINUITY MANAGEMENT

#	Recommendation
18	Ensure the safety and wellbeing of staff activated to the City's EOC.
19	Conduct a risk assessment to identify risks to critical City services and potential impacts of disruptions on critical services and resources, to inform continuity planning efforts.
20	Establish and maintain a continuity management program for the City.
21	Develop continuity plans for the City across all departments, which include the identification of critical City services and the staff required to ensure the continuity of these services.
22	Plan for the involvement of spontaneous volunteers during emergency response and recovery. The planning effort should consider whether, how, and when spontaneous volunteers can support response and recovery efforts.



Recommendations

EVACUATION PLANNING AND RESPONSE

#	Recommendation
23	<p>Develop a detailed wildfire evacuation plan that incorporates:</p> <ul style="list-style-type: none">• roles and responsibilities for the City and partner organizations;• evacuation decision procedures;• public communications procedures;• response procedures for partial or total evacuation of the community;• response procedures for supporting evacuees including consideration for the unique needs of vulnerable populations;• logistics processes and considerations relevant to evacuations; and• recovery and re-entry processes and considerations.



Recommendations

EVACUATION PLANNING AND RESPONSE

#	Recommendation
24	In collaboration with the GNWT, and as appropriate given interjurisdictional protocols, identify potential host locations for evacuees to support planning efforts. Where possible, pre-establish relationships, communication channels, and agreements.
25	Develop a clear understanding of what resources are anticipated to be required during future evacuations, and the capacity of the City to meet those requirements. For anticipated requirements beyond the City's capacity, consider preparing and delivering anticipated requests for assistance to the GNWT in advance of emergencies.
26	In collaboration with the GNWT and relevant local organizations, incorporate considerations and procedures for pets and animals in the City's evacuation plan.





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