

Regional Emergency Management Organizations (REMO)

Provincial Standards

February 2, 2026

Nova Scotia Department of Emergency Management



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Preamble

Since 2019, Nova Scotia has witnessed an increase in the number and severity of weather events. Lessons learned during the response to and recovery from these disasters has underscored the importance of effective municipal emergency management programs.

The Department of Emergency Management (DEM) has the goal of pursuing excellence in emergency management in Nova Scotia through creating a culture of preparedness and building resiliency beginning at the community level and extending to provincial programs and operations.

Municipalities are responsible for the local response to emergencies. The Regional Emergency Management Organization (REMO) model is the best way for municipalities to effectively share resources to support a consistent and intentional approach to emergency management programming.

Using findings from research into best practices and lessons learned locally, across Canada, and globally, as well as input from municipal partners themselves, DEM is setting the direction for province-wide resiliency by providing standards for REMOs. These regional organizations will support all five elements of emergency management programs: prevention, mitigation, preparedness, response, and recovery. The REMO standards are set out within three categories: structure, planning, and operations.

Citations

These standards may be cited as the REMO Standards for Nova Scotia.

Effective Date

These REMO Standards for Nova Scotia came into effect February 2nd, 2026.

Roles, Responsibilities, and Standards

Department of Emergency Management

1. All aspects of emergency management

The *Emergency Management Act* and *Emergency Preparedness and Nova Scotia Guard Act* give the Minister of the Department of Emergency Management authority over all things respecting emergency management planning, preparedness, mitigation, response, and recovery in Nova Scotia.

2. Other Ministerial authority

The Minister also has the legislated power to:

- a. Supervise relevant legislation and regulations;
- b. Coordinate emergency management plans;
- c. Make surveys and studies;
- d. Conduct public information programs;
- e. Conduct training and exercises;
- f. Procure supplies for emergencies;
- g. Authorize implementation of emergency management plans;
- h. Enter into agreements respecting emergency management plans;
- i. Lead, direct, and support a coordinated response to and recovery from emergencies, critical incidents, or other times of need;
- j. Delegate authority to a person or class or persons;
- k. Declare a State of Emergency for all or part of the Province, which gives organizations supporting the emergency response broad powers and authority to support an effective emergency response;
- l. Require municipalities to submit emergency management plans for review;
- m. Establish procedures for the prompt and efficient implementation of emergency management plans;
- n. Require any person to develop emergency management plans in conjunction with the Department or municipalities to remedy or alleviate any hazard to persons or property;
- o. Require municipalities to participate in a Regional Emergency Management Organization;
- p. Make orders to ensure public safety and compliance with legislation and regulations;
- q. Make regulations including standards for Regional Emergency Management Organizations, emergency management programs and business continuity plans.

3. Support by the Department of Emergency Management (DEM)

The Department of Emergency Management supports Regional Emergency Management Organizations (REMOs) and member municipalities through:

- Provision of templates and guidance for required documents and processes, including Emergency Management Plans, activation triggers, THIRA / HRVA, By-laws, Standard Operating Procedures, After-Action Reports, etc.;
- Provision of training and exercising opportunities through its regional and provincial staff, activities, and processes; and
- Regular review of municipal / REMO emergency management and business continuity programs to identify strengths and opportunities for improvement and prioritize gaps in capabilities to be addressed.

4. DEM may assume direction

To protect public safety, the Department of Emergency Management may assume control of any emergency or critical incident when a responsible agency, municipality, or authority is unable or unwilling to lead the response (NS Emergency Preparedness and Nova Scotia Guard Act, sections 3 and 6).

Municipalities

All municipalities in Nova Scotia are required to:

5. Participate in REMO

All municipalities must actively participate in their designated Regional Emergency Management Organization (REMO) and ensure it meets the Provincial REMO Standards and Regulations;

6. Have a By-Law

Municipalities must have an Emergency Management by-law in place. Members of the same REMO may have the same by-laws but must ensure each council approves the municipal by-law and that it receives the required Ministerial approval. By-laws must, at a minimum:

- Describe and provide details for key aspects of a comprehensive emergency management program, including, at a minimum:
- Confirm participation in a Regional Emergency Management Organization (REMO);
- Detail roles and responsibilities of elected officials, municipal staff, and key regional partners with roles in the REMO;
- Provide for a dedicated full-time position for the Regional Emergency Management Organization, shared by member municipalities (see position requirements in Appendix B);
- Require a joint Regional Emergency Management Plan;
- Require the review, revision, updating, and approval of all aspects of the

Regional Emergency Management Program by the REMO Planning Committee and DEM every two years;

- Establish a REMO Emergency Operations Centre (EOC) or Emergency Coordination Centre (ECC) that follows provincial standards;
- Outlines a process for the REMO to seek municipal approval to enter into mutual aid agreements with organizations and/or other municipalities.

7. Oversee REMO

Member municipalities must ensure their REMO meets required minimum capabilities set out by the Department of Emergency Management.

Regional Emergency Management Organizations

Regional Emergency Management Organizations (REMOs) must meet the following capabilities through implementation plans clearly laid out in by-laws, plans, and standard operating procedures:

8. Regional Emergency Management Plan

Prepare and coordinate the Regional Emergency Management Plan that includes, at a minimum, the details for:

- Leading emergency operations on behalf of the partner municipalities in the REMO;
- Coordinating all emergency management services and resources for the REMO;
- Ensuring the participation of REMO and municipal staff, and key elected officials, in regional and provincial emergency management and business continuity exercises and training as required by the Department of Emergency Management;
- Ensuring the designated emergency management lead and/or alternate(s) can be contacted by DEM or other emergency management partners at all times;
- Identifying a Primary and Alternate for the (Provincial) Regional Emergency Action Committee (REAC);

9. REMO EOC / ECC

Provision must be made to establish, operate, and maintain of a REMO Emergency Operations Centre or Emergency Coordination Centre (REMO EOC / ECC) that meets minimum requirements established in Appendix B of these standards.

10. Emergency Management Program

A regional emergency management program must be outlined in by-laws, plans, and other supporting documents that, at a minimum:

- Aligns with Provincial legislation, regulations, standards, guidance, and standard operating procedures;
- Contains a clear description of the REMO's components, goals, and how the program will be implemented, reviewed, and updated;
- Includes a Threat Hazard Identification and Risk Assessment or Hazard Risk Vulnerability Assessment to be reviewed and updated as necessary every two years and a new THIRA conducted every ten years;
- Plans for communication redundancies including the provision and use of backup communications in the event of the loss of phone, cellular and/or internet service. The plan must include consideration of how the REMO will inform staff, elected officials, the public, address media queries and social media content, and inform DEM of developments at the REMO level;
- Outline comprehensive procedures for initiating and managing evacuations and shelter-in-place actions, including defined triggers for activating predetermined supports such as reception centres and shelters, and incorporate specific plans for high-risk areas where egress may be limited or challenging. ;
- Describes the roles and responsibilities for all REMO and municipal staff, elected officials, and key municipal EM partners who will be involved in the emergency response, outlining a clear chain of command for decision-making;
- Describes in detail the process and authority for direction and control of emergencies by the REMO, CAOs, elected officials, and staff within the EOC / ECC;
- Plans for required participation by key elected officials, staff, and partners in regionally- and provincially-led training and exercises. All training and exercise plans must comply with DEM standards and requirements. At a minimum, there will be two facilitated discussion or tabletops annually and a full-scale exercise in each region every four years;
- Details how a Vulnerable Persons Registry (VPR) will be operated in compliance with Provincial legislation, regulations, standards, and guidance.
- Provides for regular review of the REMO EM program by the REMO Planning Committee every two years in consideration of Nova Scotia legislation, regulations, standards, guidance, and lessons learned from events and exercises;
- Outlines the process for identifying and tracking lessons learned from exercises and events, the preparation of after-action reports for significant events and exercises, and implementing recommendations;
- Contains a public alerting plan that includes the identification of REMO alert

requestors or issuers and authorizers, as well as participation in relevant public alerting training;

- Details the process and plan for delegation of authority to ensure continuity of operations;
- Provides a recovery plan that includes planning for emergency social services and psychosocial supports for residents affected by the disaster;
- Identifies and plans for impacts to regional critical infrastructure and essential services through hazard-specific plans;
- Includes consideration for the use of provincial DEM platforms (e.g., WebEOC) with DEM training provided; and
- Identifies capability thresholds at which point the REMO may request assistance or resources from DEM Regional Operations, the Provincial Coordination Centre, or other sources.
- Provides for review every two years by DEM and the REMO of its Regional Emergency Management Program to identify strengths and gaps to be addressed.

11. Business Continuity Plan

Each REMO must have a Business Continuity Plan (BCP) in place that identifies how its operations will continue to function in the event of a disruption.

12. Mutual Aid Agreements

REMOs may form mutual aid agreements or memoranda of understanding with other municipalities, non-governmental organizations, or other entities to support regional emergency management planning, preparedness, response, and recovery operations. Such agreements will be in addition to the supports and services available to the region through the Nova Scotia Guard.

13. Activation Triggers

REMOs will develop activation triggers for their EOC / ECC detailing at which levels it will activate in the event of an emergency. The triggers will also outline deactivation / demobilization processes. Provision must be made to activate the REMO EOC/ECC in the event of the activation of the DEM Regional Emergency Operations Centre (REOC) or Provincial Coordination Centre at Full Activation, or upon the request or recommendation by DEM leadership or staff. See *Appendix E* for further information.

Activation triggers will include, at minimum, consideration of:

- Wildland fires with municipal risks/impacts
- Evacuations

- Floods
- Hurricanes
- Severe winter storms
- Extreme heat
- Extreme cold
- Prolonged power outages

14. Public Alerting

REMOs and member municipalities must follow policies and procedures as established by DEM for requesting or issuing public alerts. This include identifying authorized issuers and notifying DEM. REMO staff, elected officials, municipal first responders, designated municipal staff and key regional emergency management partners must participate in public alerting education as required by DEM.

15. Notification

REMOs and partner municipalities must ensure the prompt notification of DEM of:

- An actual or developing emergency or potential emergency that threatens the safety, well-being, or property of the residents in a manner that requires or may require the support from the Department of Emergency Management or other provincial resources;
- Impacts to the Region or a member municipality from an emergency;
- Activation of a REMO EOC / ECC ;
- The opening of a comfort centre or reception centre by a REMO; and
- The potential or actual requirement for assistance from DEM including support from the Nova Scotia Guard.

16. Review

The Department will meet with municipalities regularly (at minimum, every two years) to review these Standards.

Appendix A: Definitions

In these Regional Emergency Management Organization Standards, terms are defined as follows:

Business Continuity Management	Holistic management process that identifies potential threats to a department and the impacts on business operations (especially critical business functions) that those threats, if realized, might cause. It provides a framework for building organizational capacity and developing resilience, supporting an effective and efficient response to disruptive events.
Business Continuity Plan (BC Plan)	A documented collection of procedures and information that is developed, compiled, and maintained in readiness for use in a disruptive event, which will enable the department to recover and continue to deliver its critical products and services at an acceptable predefined level.
Critical Business Function	High priority business activities, programs and services that are essential in meeting the department or government mandate, and which have the highest priority in terms of business continuity and recovery time objective.
Critical Infrastructure	The processes, systems, facilities, technologies, networks, assets, and services essential to the health, safety, security or economic well-being of Nova Scotians and the effective functioning of government.
Emergency	A present or imminent event in respect of which the Minister or a municipality believes prompt co-ordination of action or regulation of persons or property must be undertaken to protect property or the health, safety or welfare of people in the Province.
Emergency management	The management of emergencies concerning all-hazards, including all activities and risk management measures related to prevention and mitigation, preparedness, response and recovery
Emergency management plan	A document to define programs and procedures that is intended to mitigate the effects of an emergency or disaster and to provide for the safety, health or welfare of the civil population and the protection of property in the event of such an occurrence.

Emergency management program	A risk-based program consisting of elements covering prevention, mitigation, preparedness, response, and recovery activities.
Extreme Cold	When the temperature or wind chill is expected to reach or fall below – 15 degrees Celsius/ windchill warning over – 20 degrees Celsius for at least two hours, triggering an extreme cold warning.
Extreme Heat	A period of two or more consecutive days, with no relief overnight, where forecast daytime maximum temperatures exceed +29 degrees Celsius/ Humidex over +30 degrees Celsius, and nighttime minimum temperatures exceed +16 degrees Celsius.
Flood	A flood is an overflow of a large amount of water beyond its normal limits over what is normally dry land. Historically, flooding has occurred for a number of reasons such as during periods of heavy rainfall, snow melt, ice jams, high tides, storm surge or a combination of each.
Hazard	A potentially damaging physical event, phenomenon, or human activity that may cause the loss of life or injury, property damage, social and economic disruption, or environmental degradation.
Hurricane	Hurricanes are tropical cyclones with maximum sustained surface winds of at least 118 kilometres per hour. There are 5 classes of hurricane intensity as outlined by the Saffir-Simpson Scale.
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.
Mitigation	Sustained actions taken to eliminate or reduce risks and impacts posed by hazards well before an emergency or

disaster occurs; mitigation activities may be included as part of prevention.

Municipality

A city, incorporated town, or municipality of a county or district.

Preparedness

Actions that involve a combination of planning, resources, training, exercising, and organizing to build, sustain, and improve operational capabilities. Preparedness is the process of identifying the personnel, training, and equipment needed for a wide range of potential incidents and developing jurisdiction-specific plans for delivering capabilities when needed for an incident.

Prolonged Power Outage

A prolonged power outage is one that requires the activation of a comfort centre. The length of time that defines this is typically based on the needs of the affected community and determined through consultation with emergency management partners.

Provincial Liaison Officer

A representative of Joint Task Force Atlantic who is located at EMO and acts as that vital link between civilian and military operations.

Regional Emergency Action Committee (REAC)

A provincially lead committee composed of key regional stakeholders from emergency services, provincial departments, and partner agencies that supports the regional response to emergencies and critical incidents. It provides operational guidance, situational awareness, and decision-making support during actual emergency events.

REMO Advisory Committee

A committee that provides guidance, advice, and strategic input to the Regional Emergency Management Organization (REMO) on emergency management priorities, policies, and initiatives. Made up of elected from each municipal unit in the REMO, CAOs and Emergency Management staff. Its role does not include operational decision-making.

Regional Emergency Operations Centre (REOC / ECC) (Provincial)	The Department of Emergency Management (DEM) will operate Regional Emergency Operations Centres (REOC / ECCs) that and will contain the necessary working space and communications capacity to enable effective coordination of emergencies at the Regional level by DEM. Outside of emergencies, these facilities will house the regional staff and programs to support REMOs. These provincial facilities are referred to as REOC / ECC s in plans, standards, and guidance.
Regional Emergency Management Organization Emergency Operations Centre or Emergency Coordination Centre (REMO EOC / REMO ECC) (Municipal)	Each REMO will establish and operate a REMO Emergency Operations Centre. This is also a physical location with the space and equipment necessary to maintain effective coordination of emergencies and communication with the Provincial REOC / ECC and PCC. These facilities are differentiated with the name REMO EOC / ECC in plans, standards, and guidance.
REMO Planning Committee	A committee responsible for developing, reviewing, and maintaining regional emergency management plans, procedures, and exercises. It supports REMO by ensuring planning activities are coordinated, up-to-date, and aligned with provincial and municipal requirements.
Severe Winter Storm	A severe winter storm can include a wide variety of dangerous weather conditions including extreme cold, blinding blizzards and ice storms. Severe winter storms typically accompany a Weather Advisory Alert or Winter Storm Warning administered by Environment and Climate Change Canada.
State of emergency	A state of emergency declared by the Minister, pursuant to the <i>Emergency Management Act</i>.
State of local emergency	A state of local emergency declared by a municipality or renewed by it, pursuant to the <i>Emergency Management Act</i>.

Appendix B: Municipal Emergency Management Roles Responsibilities

Leadership & Program Compliance

Role: Provide strategic leadership and ensure REMO compliance with provincial legislation and standards.

Minimum Standards / Deliverables:

- Maintain compliance with the Nova Scotia Emergency Management Act and related regulations.
- Submit updated Emergency Management Program documents to DEM at least every two years.
- Provide semi-annual reports to CAOs and municipal councils with policy recommendations.
- Strive to participate in 100% of required provincial or regional emergency management committees.

Emergency Planning & Coordination

Role: Lead the development and coordination of regional emergency management plans and partnerships.

Minimum Standards / Deliverables:

- Review and update the Regional Emergency Management Program annually.
- Update contingency plans (evacuation, communications, hazard-specific) at least every two years.
- Conduct THIRA (Threat and Hazard Identification and Risk Assessment) every two years and complete full reassessment every 10 years.
- Maintain active and current Mutual Aid Agreements and MOUs with partners, reviewed at least every 3 years.

Emergency Operations & Response

Role: Lead emergency activations and ensure the operational readiness of the Regional Emergency Coordination Centre.

Minimum Standards / Deliverables:

- ECC meets or exceeds all DEM facility and operational standards.
- Maintain 24/7 contact readiness and ensure 2+ trained alternates available at all times.
- Document and submit incident reports within 30 business days post-event.

- Participate or lead in all major regional emergency activations.

Training, Exercises & Evaluation

Role: Develop and implement a regional training and exercise program to ensure preparedness.

Minimum Standards / Deliverables:

- Conduct at least:
2 tabletop or facilitated discussion annually.
- 1 full-scale exercise every 4 years.
- Ensure compliance with DEM training standards for municipal staff and volunteers.
- Complete After-Action Reports (AARs) and Improvement Plans (IPs) within six months of exercises or incidents.

Public Awareness & Communication

Role: Lead public education and maintain emergency communications systems.

Minimum Standards / Deliverables:

- Deliver a minimum of 4 public outreach events or campaigns per year (one per quarter).
- Ensure at least 2 trained authorized public alert issuers per municipality.
- Maintain redundant internal and external communications systems, tested quarterly.
- Update public emergency communication procedures annually.

Recovery & Mitigation

Role: Coordinate disaster recovery and promote risk reduction initiatives.

Minimum Standards / Deliverables:

- Complete initial impact assessments within 5 business days of an event.
- Submit Disaster Financial Assistance (DFA) applications within provincial timelines.
- Incorporate mitigation strategies into planning documents within 12 months of relevant assessments or events.

Business Continuity & Administrative Management

Role: Ensure continuity of essential municipal services and maintain administrative records.

Minimum Standards / Deliverables:

- Assist municipalities in identifying critical functions and ensure plans are updated biennially.
- Maintain accurate records and reports of all emergency management activities and updates.
- Submit a comprehensive annual report to all CAOs and municipal councils each year.

Inter-Municipal & Provincial Liaison

Role: Serve as the key point of contact with DEM and facilitate inter-municipal coordination.

Minimum Standards / Deliverables:

- Should strive to attend all regional/provincial coordination meetings either in-person or virtually.
- Provide quarterly briefings to CAOs summarizing inter-agency developments or changes.
- Maintain regular communications (at least monthly) with DEM Regional Managers and/or Outreach Officers.

Availability & Operational Readiness

Role: Be available for emergency activations and on-call duties.

Minimum Standards / Deliverables:

- Participate in on-call rotation as scheduled, with response within 30 minutes of call-out.
- Maintain operational readiness of personal and regional response equipment.
- Complete a readiness checklist for REMO's facilities and systems.

Notes:

- These deliverables represent minimum expectations and can be adjusted based on local needs, scale of operations, or performance plans.
- Performance against these standards should be reviewed annually in collaboration with CAOs and councils.

Appendix C: Minimum Requirements for REMO Emergency Operations Centres / Emergency Coordination Centres

A committee will explore technical requirements, equipment

- Size and location, number of people it can hold
- Capability for virtual or in-person activation with in-person preferred when there are impacts and the REOC or PCC are at full activation. (Communication redundancies are already a standard).
- (It was recommended that both virtual and in-person activations be exercised)

Appendix D: Standards for Use and Management of Vulnerable Persons Registries

- Details to follow

Appendix E: Weather Impact Guide

Colour-coded Weather Alerts

Weather Impact Guides



With our colour-coded weather alert system, the colour of the alert is determined by looking at the potential impacts weather might have, along with the confidence level that the weather causing that impact will occur.

The three levels of impact we alert for – moderate, high, and extreme – are guided by a series of impact tables, where the increasing impact is considered according to potential travel delays, utilities disruption, damage to property, potential for impact to human health, and how long it might take society to recover.

This generic impact guide shows how the severity of the impacts increase, progressing from moderate to high to extreme.

	Moderate	High	Extreme
General	Limited disruption to daily life	Considerable disruption to daily life	Lengthy disruption to many aspects of daily life
Travel	Travel delays possible	Major travel disruption	Prolonged travel disruption
Utilities and services	Disruption to utilities and services may occur	Utilities and services likely impacted	Significant impact to utilities and services
Land and structures	Minor damage to property	Substantial property damage	Extensive property damage
Human health	Increased risk of injury, illness, or death	Higher risk of injury, illness, or death	Highest risk of injury, illness, or death
Societal recovery	Relatively quick recovery	A few days for recovery	Long duration recovery

Impact guides for main weather hazards can be found below. These guides replace the former criteria for public weather alerts. They give details of the various potential impacts for each of fourteen common Canadian weather hazards. The impacts listed are not an exhaustive list, but an example of the range of impacts you might expect at that level. For a specific weather event, impacts will vary by location, antecedent conditions, timing, and by the vulnerability of the impacted area and/or people. Please note these are guidelines, and do not include secondary



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or specific impacts like business or school closures, which could be consequences of a direct impact like travel or utilities being disrupted.

Remember: All weather can have serious results. It can be life-threatening at any impact level.

Coastal flooding/storm surge

Adverse impacts are expected due to elevated water levels in coastal regions.

Moderate	High	Extreme
- Travel routes difficult or dangerous to navigate - Local utility outages - Some overland and basement flooding - Coastal shoreline erosion in sensitive areas - Water over banks and in yards or campgrounds - Properties in coastal locations affected by spray, wave overtopping or sewage backup - Damage to shoreline adjacent buildings/structures/boats - People close to the shore are at risk of injury due to strong currents or the rapid approach of unexpectedly larger waves	- Widespread travel disruptions - Dangerous route conditions - Widespread utility outages - Coastal water well contamination from sea water - Main floor flooding affecting properties and parts of communities - Erosion and/or damage to shoreline and riverbanks - Infrastructure including docks, breakwaters, retaining walls, dikes damaged or destroyed - Major damage to buildings and structures - Essential services delays; significant delays for emergency responders - Increased risk of injury/fatalities from landslide or drowning	- Travel routes very dangerous and/or impassable, including nearshore roads and evacuation routes - Widespread flooding - Prolonged, widespread utility outages - Vehicles destroyed or washed away - Widespread building and structural damage or destruction - High risk of injury/fatalities from landslide or drowning - Critical infrastructure including dams, dikes and pumping infrastructure compromised/destroyed - Essential service disruption

Cold (extreme cold, Arctic outflow)

Adverse impacts are expected due to extreme cold temperatures or wind chill.

Moderate	High	Extreme
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• Risk of cold injury, such as frostnip, frostbite or hypothermia, without adequate protection • Higher risk of illness or death from being exposed to cold • Road de-icing may be less effective • Vehicle charging, battery levels, tire performance may be affected • Water pipes freeze or burst • Minor tree and vegetation damage • Outdoor work adjusted • Outdoor events postponed or cancelled	• Very high risk of cold injury, such as frostbite and hypothermia, without adequate protection • Road de-icing less effective • Vehicle charging, battery levels, tire performance affected • Impacts to critical infrastructure, such as water mains • Tree and vegetation damage • Outdoor work suspended	• Severe risk of cold injury, such as frostbite or hypothermia, without adequate protection • Travel or outdoor activities not safe • Widespread tree and vegetation damage • Risk of widespread impacts to utilities and critical infrastructure
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Frost

Adverse impacts are expected from cold temperatures that have the potential to damage plants.

Moderate
• Widespread damage to plants or crops

Heat

Adverse impacts are expected due to significant heat and/or Humidex values.

Note: Extreme heat can create favourable conditions for wildfires and poor air quality.

Moderate	High	Extreme
• Increased risk of illness or death • Brownouts and/or power outages • Animals at risk • Outdoor events delayed and/or adjusted	• Higher risk of illness or death • Localized travel disruption • Risk of localized water shortages • Brownouts and power outages • Animals at higher risk	• Extreme risk of illness or death • Widespread travel disruption due to route damage and/or aircraft, train, or vehicle performance • Excess demand and potential damage to

• Workforce impacts due to higher temperatures indoors and outdoors	• Crops, plants, and gardens at risk of damage • Items, vehicles or materials left in direct sunlight at risk of damage • Some damage to critical infrastructure • Outdoor events delayed and/or cancelled • High impacts on essential services	• utilities, including energy and water • Power outages and water shortages • Animals at extreme risk • Crops, plants, and gardens at risk of extreme damage • Items, like vehicles or materials left in direct sunlight at risk of damage or destruction • Damage to critical infrastructure • Outdoor events delayed and/or cancelled for multiple days • Prolonged, widespread impacts on essential services
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Hurricanes and tropical storms

Adverse impacts are expected from:

- a hurricane (producing coastal winds of ≥ 118 km/h)
- a tropical storm (producing winds of 63–117 km/h)
- coastal flooding (storm surge)
- high waves with an implied threat of local flooding from heavy rains

Visit the [Canadian Hurricane Centre](https://www2.gov.bc.ca/gov2/serv/bc/hurricane/) for forecasts, warnings, and watches.

Moderate	High	Extreme
• Travel delays due to road closures, flooding, debris, power outages • Utility outages • Some damage to buildings and structures including siding and roofing	• Widespread travel disruption • Flash flooding • Widespread utility outages • Major damage to buildings and structures • Risk of injury from blown debris and storm cleanup-related accidents • Some critical infrastructure damage	• Widespread, prolonged travel disruption • Widespread, prolonged utility outages • Widespread building and structural damage or destruction • Risk of life-threatening injury • Critical infrastructure compromised/destroyed

	• Essential services delays; significant delays for emergency responders	• Prolonged, widespread essential services disruption
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Ice (freezing rain, freezing drizzle, flash freeze)

Adverse impacts are expected due to icy surfaces and ice buildup.

Moderate	High	Extreme
• Travel delays due to icy routes and vehicle collisions • Ice accumulation on powerlines, bridges and other infrastructure • Some utility outages • Some property damage, broken branches • Risk of injury due to slips and falls or falling ice or debris	• Significant travel delays, multiple vehicle collisions • Damage to powerlines, bridges, and other infrastructure • Widespread utility outages • Major property damage, treefall • Increased risk of injury due to slips and falls or falling ice or debris	• Widespread, dangerous travel conditions, including vehicle pileups • Utility poles and towers collapse • Long duration, widespread utility outages • Widespread property damage, trees destroyed • Critical infrastructure compromised

Rain

Adverse impacts are expected due to significant rainfall amounts.

Moderate	High	Extreme
• Travel delays due to overland flooding, water pooling on routes, traffic rerouting • Some utility outages • Basement flooding • Outdoor events postponed or cancelled	• Widespread overland flooding, roads covered by water • Some washouts, landslides; some communities inaccessible • Widespread travel delays • Utility outages likely, power loss can lead to pump failures • Widespread residential and business flooding • Injuries or fatalities from drowning, landslides • Vehicles damaged • Outdoor events cancelled	• Major roads/highways/bridges washed out or blocked by landslides • Travel unsafe • Widespread outages • Dams, levies and dikes, and/or pumps, compromised • Major destruction and inundation of buildings • Sewer backups and wastewater contamination • Shoreline and riverbank erosion and damage

		• Agriculture and livestock loss • Vehicles damaged and/or washed away • Multiple injuries and/or fatalities from drowning, landslides
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Snow

Adverse impacts are expected due to significant snowfall accumulations.

Moderate	High	Extreme
• Travel disruptions due to route closures, vehicle collisions, and conditions • Injuries due to exertion, falls	• Travel dangerous due to accumulated snow, route closures, and multiple vehicle collisions • Long travel delays • Property and/or tree damage • Roofs at increased risk of collapsing under the weight of snow	• Travel extremely unsafe or impossible • Significant property and/or tree damage • Damage to some critical infrastructure • Snowed-in residents, numerous injuries due to exertion and/or collapsing structures/trees • Essential services delays; significant delays for emergency responders

Snow squall

Adverse impacts are expected due to localized, intense bands of snow, generated by open water or a front.

Moderate	High	Extreme
• Travel disruptions due to route closures, vehicle collisions, and conditions • Injuries due to exertion, falls	• Travel dangerous due to accumulated snow, route closures, and multiple vehicle collisions • Long travel delays expected • Stranded vehicles and passengers • Property and/or tree damage • Some utility outages	• Very dangerous and/or impassable routes • Prolonged, widespread travel delays • Vehicles and passengers stranded for long periods • Utility outages • Significant impact on delivery of essential goods and services

	• Roofs at increased risk of collapsing under the weight of snow • Significant delays for emergency responders	
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Thunderstorms

Adverse impacts are expected due to hail and/or wind and/or rain associated with thunderstorms.

Note: Lightning can occur with any thunderstorm.

Moderate	High	Extreme
• Some travel delays • Driving conditions difficult • Local utility outages • Damage to roofs, fences, soft shelters and trees • Potential for flooding • Risk of injury	• Travel delays and/or cancellations • Utility outages • Significant damage to buildings, structures and trees • Potential for dangerous flooding; fast moving water can sweep vehicles away and damage infrastructure • Risk of serious injury • Some critical infrastructure damage • Essential services disruption	• Prolonged or widespread travel delays or cancellations • Prolonged or widespread utility outages • Buildings and many trees destroyed • Potential for extreme flooding; fast moving water will sweep vehicles away and damage infrastructure • Risk of life-threatening injury • Critical infrastructure compromised/destroyed • Prolonged essential services disruption

Tornadoes

Adverse impacts are expected from violently rotating, damaging winds associated with thunderstorms.

Moderate	High	Extreme
• Travel routes difficult or dangerous to navigate • Travel delays due to road closures, debris, power outages	• Travel routes dangerous to navigate • Widespread travel disruption • Widespread utility outages	• Very dangerous and/or impassable travel routes • Prolonged, widespread travel disruption including vehicles blown around or destroyed

• High-sided vehicles pushed around • Local utility interruptions or outages • Outdoor events postponed or cancelled • Damage to trees • Minor damage to property including buildings, vehicles, signs, fences, loose items • Risk of injury from flying or falling debris	• Significant, widespread tree damage • Essential services delays; significant delays for emergency responders • Significant damage to buildings and property including boats, sheds, RVs, small planes • Increased risk of serious injury from flying or falling debris or collapsing structures/trees • Some critical infrastructure damage	• Prolonged, widespread utility outages • Transmission/utility tower collapse • Stands of trees (forests, orchards, parks) flattened/destroyed • Prolonged essential services disruption • Homes/buildings destroyed • High risk of serious injury from flying/falling debris or collapsing structures/trees • Major agriculture/livestock losses • Critical infrastructure compromised/destroyed; supply chain impacted
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Visibility (blizzards, blowing snow, dust, fog)

Adverse impacts are expected due to widespread poor visibility.

Moderate	High	Extreme
• Routes difficult to navigate • Travel delays and disruptions due to route closures, collisions, gridlock	• Travel dangerous to impossible • Widespread travel disruption, multiple collisions • Increased risk of disorientation or becoming lost over short distances • Some vehicles and passengers stranded • Major delays for emergency response	• Travel extremely dangerous and/or impossible • Prolonged, widespread travel disruption • Vehicles and passengers stranded for long periods • Significant impact on delivery of essential goods and services • High risk for mass casualty incidents affecting emergency responders and hospitals

Wind

Adverse impacts are expected from damaging winds.

Moderate	High	Extreme
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• Minor travel delays due to debris and outages • Some short term utility outages • Larger tree branches broken; some yard items blown about • Risk of injury from flying or falling debris • Outdoor events postponed or cancelled	• Major travel delays due to debris and outages • High-sided vehicles pushed around • Widespread utility outages • Some roof damage • Small to medium trees snapped • Some damage to critical infrastructure • Increased risk of injury from flying or falling debris • Outdoor events cancelled • Essential services disruption	• Widespread, prolonged travel delays due to road closures, debris, downed power lines • High-sided vehicles tipped or flipped • Long duration, widespread utility outages • Structural damage to homes and buildings • Significant damage to trees including orchards, parks • Critical infrastructure compromised • High likelihood of injury due to flying or falling debris • Prolonged essential services disruption
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Winter storm

Adverse impacts are expected from multiple types of severe winter weather.

Moderate	High	Extreme
• Travel disruptions due to route closures, vehicle collisions, and winter conditions • Local utility interruptions or outages • Larger tree branches broken	• Dangerous travel conditions; widespread travel delays and road closures • Vehicles and passengers stranded, numerous vehicle collisions • Utility outages • Structural damage to roofs/buildings • Significant tree damage • Essential services delays; significant delays for emergency responders	• Travel unsafe; prolonged, widespread travel delays • Vehicles and passengers stranded for long periods • Prolonged, widespread utility outages • Major damage and destruction to homes and buildings • Stands of trees flattened or destroyed • Prolonged essential services disruption

Glossary

Useful terms to understand the impact guides:

- Critical infrastructure: physical systems and facilities – like power grids, water treatment plants, hospitals, and transportation networks – that support the functioning of society
- Essential services: activities or functions provided by people or organizations – like health care, emergency response, and public transit – that rely on critical infrastructure to operate
- Prolonged: impacts will continue for a long time or longer than usual
- Utilities: services that include electricity, internet, cellular and landline telephone, water, and gas supply
- Widespread: impacts will be found or distributed across a wide area.