

SEVERE SEASONAL WEATHER - WINTER

SEVERE SEASONAL HAZARD RESPONSE | SEOC QUICK REFERENCE

Severe winter weather includes blizzards, ice storms, heavy snow, extreme cold, and snow squalls. While winter storms offer days of predictive lead time compared to summer events, they still pose significant risks. These storms cause prolonged transportation disruptions, damage the electrical grid, and create public health emergencies during extended power outages.

APPENDIX PURPOSE

Coordinates the multi-agency response to severe winter weather extremes. Staff use this appendix to sustain public warming centers, execute welfare checks, coordinate large-scale grid restoration, and monitor critical transportation infrastructure during blizzards, ice storms, and extreme cold events.

LEAD AGENCY

Maine Emergency Management Agency
 Establishes National Weather Service (NWS) communication, manages response activities, synchronizes resource requests, coordinates public information, and advises the Governor.

SEOC TIMELINE, TRIGGERS, & ACTIONS

Enhanced Monitoring (L3)

- NWS forecasts significant winter system
- Conduct initial coordination
- Review heating fuel levels
- Monitor municipal road salt stockpiles

Partial Activation (L2)

- NWS issues severe winter watches
- MaineDOT pre-treats roads
- Coordinate warming center standby
- Issue public travel plan warnings

Full Activation (L1)

- NWS issues severe winter warnings
- Manage highway blockages
- Clear priority transportation routes
- Track real-time power outages

CRITICAL INFORMATION REQUIREMENTS

TRANSPORTATION DISRUPTION
 Have impassable interstates trapped motorists and halted critical supply chains?

GRID COLLAPSE & FUEL
 Have ice accumulations caused catastrophic electrical failure, and have regional heating fuel shortages been identified?

STRUCTURAL THREATS
 Have excessive snow loads caused widespread roof collapses on commercial buildings, agricultural facilities, and residential homes?

HAZARD FOCUS



ESSENTIAL ELEMENTS OF INFORMATION

<p>Universal Impacts</p> <ul style="list-style-type: none"> • Roads: Status of state roads and interstate highways. • Power: Customer outages by county and estimated restoration time. • Mass Care: Capacities of open warming centers. • Commodities: Status of home heating fuel deliveries, diesel supplies, and municipal road salt stockpiles. • Resources: Requests for specialized assets. 	<p>Hazard-Specific Data</p> <ul style="list-style-type: none"> • Blizzard: Snowfall rates and visibility restrictions. • Ice Storm: Radial ice accretion totals. • Cold: Forecasted wind chill minimums. • Squall: Visual confirmation of highway conditions via MaineDOT cameras.
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CRITICAL DEFINITIONS FOR PLANNING

Blizzard Warning	Sustained winds of 35 mph or greater combined with falling or blowing snow to reduce visibility to 1/4 mile or less for at least 3 hours.
Ice Storm Warning	Crippling ice accumulations of 1/2 inch or more that snap tree limbs and down utility lines.
Nor'easter	Disruptive low-pressure system bringing heavy snow, gale-force winds, and coastal storm surge.
Wind Chill Warning	Wind and cold temperatures combine to create dangerous conditions that accelerate heat loss from exposed skin.
Winter Storm Severity Index	Scale used by the National Weather Service to communicate the operational impact of winter weather based on factors like snow amount, ice accumulation, and wind.
Watch vs. Warning	Watch: Hazardous weather is possible . Warning: Hazardous weather is occurring or imminent .

WINTER STORM SEVERITY INDEX (WSSI)

Scale	Typical Damage and Effects
Limited	Rarely a direct threat to life and property. Typically results in little inconveniences to daily life.
Minor	Rarely a direct threat to life and property. Typically results in an inconvenience to daily life and minor travel disruptions.
Moderate	Often results in some disruptions to daily life. Hazardous driving conditions and localized infrastructure impacts are possible.
Major	Extensive property damage is likely (e.g., roof collapses, severe ice damage to the utility grid). Significant disruptions to daily life and travel are expected. Immediate life-saving actions may be needed.
Extreme	Extensive and widespread severe property damage. Results in extreme disruptions to daily life and the complete paralysis of the Transportation Lifeline. Immediate life-saving actions will be needed.

Citation: https://www.weather.gov/ict/WSSI_Overview