

HURRICANES & TROPICAL STORMS

SEVERE SEASONAL HAZARD RESPONSE | SEOC QUICK REFERENCE

Hurricanes and Tropical Storms are large, organized storms that can produce dangerous winds, extreme rainfall, storm surge, and tornadoes. These massive systems can also cause fatalities, injuries, property damage, infrastructure damage, agricultural loss, and business interruption.

APPENDIX PURPOSE

Coordinates the multi-agency response to tropical cyclones. Staff implement this appendix to manage complex coastal evacuations, mass sheltering, commodities distribution, debris management, and fatality management prior to and following landfall.

LEAD AGENCY

Maine Emergency Management Agency
Establishes National Hurricane Center communication, coordinates Emergency Management Assistance Compact requests, and advises the Governor.

SEOC TIMELINE, TRIGGERS, & ACTIONS

Enhanced Monitoring (L3)

- National Hurricane Center issues 5-day forecast track
- Draft SEOC manning roster
- Verify staging areas & MOUs
- Initiate mass care coordination

Partial Activation (L2)

- Establish Evac Ops Group
- Assess mass transit requirements
- Request State of Emergency
- Initiate shelter operations

Full Activation (L1)

- General evacuations begin (E0)
- Close bridges/transport routes
- Stage life-safety rescue teams
- Secure infrastructure before winds

CRITICAL INFORMATION REQUIREMENTS

COASTAL EVACUATION & PORTS

Do multiple coastal towns require mass evacuation or show infrastructure failure?

DAM STABILITY & BASINS

Have major river basins exceeded flood stage, and are dams facing overtopping risks?

WIDESPREAD POWER FAILURE

What percentage of the state population lacks power, and what is the estimated time of re-establishment?

HAZARD FOCUS



INLAND FRESHWATER FLOODING



AMPLIFIED COASTAL STORM SURGE



ISOLATED RAIN BAND TORNADOES



HIGH-IMPACT SUSTAINED WINDS

ESSENTIAL ELEMENTS OF INFORMATION

<p>Universal Impacts</p> <ul style="list-style-type: none"> • Damage: Debris type & clearance volume. • Roads/Bridges: Real-time status of closures. • Power: Customer outages by utility & restoration time estimates. • Search & Rescue: Locations, numbers evacuated. • Resource Needs: Requests for specialized assets. 	<p>Hazard-Specific Data</p> <ul style="list-style-type: none"> • Coastal: Actual tide levels vs. forecast levels. • Inland Floods: USGS river gauge readings and dam spill way rates. • Wind: Max wind gusts from official stations. • Tornado/Microburst: Path length, width, and Enhanced Fujita Scale (EF Scale) rating.
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CRITICAL DEFINITIONS FOR PLANNING

H Hour	Marker signifying the arrival of tropical storm force winds. High-profile vehicle movement must end before H Hour.
E Hour	Marker indicating the start of evacuation operations. Calculated by subtracting clearance time from H Hour.
HURREVAC	Decision-support tool used to calculate evacuation clearance times and inform evacuation timing.
Cone of Uncertainty	Graphic showing probable track based on forecast errors. Does not represent storm size, wind extent, or impact area.
Storm Surge	Abnormal, destructive rise of ocean water above predicted astronomical tides, driven by severe storm winds.

SAFFIR-SIMPSON HURRICANE WIND SCALE

[Including an excerpt of Beaufort Wind Scale for tropical depression category]

Category	Sustained Wind Speed	Effects
Tropical Depression	0 to 38 mph	Tropical disturbances originate in tropical waters
	Beaufort Scale 5 19-24 mph	Moderate waves (6-10 ft), small trees begin to sway
	Beaufort Scale 6 25-31 mph	Large waves (9-13 ft), large branches in motion
	Beaufort Scale 7 32-38 mph	High wind, moderate gale, large 13-19 ft waves, large trees in motion
Tropical Storm	Winds: 39-73 mph	Sustained winds capable of causing structural damage, typically at ≥ 58 mph
Hurricane Category 1	Winds: 74–95 mph	Very dangerous winds will produce some damage
Hurricane Category 2	Winds: 96–110 mph	Extremely dangerous winds will cause extensive damage
Hurricane Category 3	Winds: 111–129 mph	Devastating damage will occur
Hurricane Category 4	Winds: 130–156 mph	Catastrophic damage will occur
Hurricane Category 5	Winds: 157+ mph	Catastrophic damage will occur