

FLOODING

SEVERE SEASONAL HAZARD RESPONSE | SEOC QUICK REFERENCE

Flooding is one of Maine's most frequent and destructive natural disasters, threatening infrastructure, property, and local economies. Because flood conditions escalate with little warning, the response demands the immediate deployment of life-saving resources, efforts to restore disrupted transportation networks, action to address contaminated water supplies, and the safeguarding of displaced populations.

APPENDIX PURPOSE

Coordinates the multi-agency response to destructive flood events. Staff use this appendix to mobilize high-clearance water vehicles, support municipal sandbagging, coordinate life-saving evacuations, monitor dam integrity, and execute boil-water advisories for compromised systems.

LEAD AGENCY

Maine Emergency Management Agency

Establishes National Weather Service (NWS) communication, coordinates resource requests, monitors hydrological data, synchronizes public information, and advises the Governor.

SEOC TIMELINE, TRIGGERS, & ACTIONS

Enhanced Monitoring (L3)

- NWS issues specific flood watches
- Monitor USGS river gauge telemetry
- Conduct coordination calls with DEP
- Verify sandbag and pump stockpiles

Partial Activation (L2)

- NWS issues specific flood warnings (Moderate flood)
- Stage state managed assets
- MaineDOT pre-positions barricades
- Issue coordinated evacuation warnings

Full Activation (L1)

- NWS issues specific flood warnings (Major flood)
- Rivers crest or flash flooding occurs
- Monitor the securing of compromised roads & bridges
- Synchronize mass care logistics

CRITICAL INFORMATION REQUIREMENTS

RIVERINE & DAM THREATS

Have major river systems exceeded flood stage, and are any dams facing structural failure or overtopping?

COMMUNITY ISOLATION

Have rising floodwaters or washed-out bridges isolated communities from medical/supply access?

COASTAL INUNDATION

Does peak storm surge coincide with astronomical high tides, and have severed causeways isolated islands?

HAZARD FOCUS



INLAND FRESHWATER FLOODING



COASTAL FLOODING AND STORM SURGE

ESSENTIAL ELEMENTS OF INFORMATION

Universal Impacts	Hazard-Specific Data
<ul style="list-style-type: none"> • Washouts: Status of state highways, local roads, and bridges. • Shelters: Geographic locations, capacities, and unmet needs. • Water Systems: Operational status of drinking and wastewater facilities. • Rescues: Number and location of active swift-water boat rescues. • Hazmat: Number and severity of environmental spills. 	<ul style="list-style-type: none"> • Washouts: Status of state highways, local roads, and bridges. • Shelters: Geographic locations, capacities, and unmet needs. • Water Systems: Operational status of drinking and wastewater facilities. • Rescues: Number and location of active swift-water boat rescues. • HAZMAT: Number and severity of environmental spills.

CRITICAL DEFINITIONS FOR PLANNING

Flash Flood Warning	Urgent warning issued when a sudden, violent flood develops in minutes or hours.
100-Year Flood	Base flood event with a 1 percent annual chance of being equaled or exceeded.
Hydrostatic Pressure	Pressure exerted by standing or slow-moving water against infrastructure.
Storm Surge	An abnormal, destructive rise of ocean water above predicted astronomical tides, driven by severe storm winds and low pressure.
Watch vs. Warning	Watch: Hazardous weather is possible . Warning: Hazardous weather is occurring or imminent .

FLOOD SEVERITY & INTENSITY CATEGORIES

Flood Category	Typical Damage Observations
Minor	Minimal property damage occurs. Primary threats are public nuisance, such as the temporary inundation of secondary dirt roads, public parks, and known low-lying agricultural fields. There is typically no immediate threat to life safety, though minor traffic detours may be required.
Moderate	Damaging inundation of residential structures and paved roads near streams and coastlines begins to occur. Floodwaters may breach residential basements or low-elevation commercial spaces. Localized, targeted evacuations of vulnerable populations and the transfer of valuable property (vehicles, livestock) to higher elevations become necessary, prompting the activation of municipal shelters.
Major	Extensive, catastrophic, and deep inundation of residential structures, commercial districts, and primary transportation arteries (including state highways). Significant, widespread, and formally mandated evacuations are required to preserve life safety. Communities may face multi-day isolation due to structural collapses.
Record	Flooding that equals or exceeds the highest documented water stage or volumetric discharge ever previously observed at a specific geographic location. This represents an unprecedented, highly destructive event requiring massive mutual aid support, federal intervention, and long-term recovery phases spanning months or years.

Citation: <https://forecast.weather.gov/glossary.php?word=flood+categories>