

IA 1 – Weather Emergencies

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IA 1 Tasked Agencies	
Primary County Agencies	Clackamas County Disaster Management (CCDM) Fire Defense Board Sheriff's Office Department of Transportation and Development (DTD)
Supporting County Agencies	Department of Health, Housing, and Human Services Public and Government Affairs Water Environment Services
Community Partners	American Red Cross Clackamas County Amateur Radio Emergency Services (CARES) National Weather Service (NWS) Utilities (Portland General Electric Company)

1 Purpose and Scope

Clackamas County is vulnerable to a variety of weather emergencies that can cause significant damage and hardship. This annex outlines the tasks and responsibilities required to respond effectively to these incidents to help minimize damage to people and property.

2 Policies and Authorities

None at this time.

3 Situation and Assumptions

3.1 Situation

A major weather emergency is a County emergency requiring notification of Clackamas County Disaster Management (CCDM), implementation of the Emergency Operations Plan (EOP), and, possibly, activation of the Emergency Operations Center (EOC). All weather incidents are managed according to the National Incident Management System (NIMS)/Incident Command System (ICS).

3.2 Assumptions

- Weather conditions that may impact Clackamas County include drought, flood, severe storm/high winds, tornado, winter storm/ice storm.
- Winter storms/avalanche, floods, and windstorms/tornadoes may require significant emergency operations to protect life and property and to move residents from harm's way.
- Periods of extreme heat can be hazardous to citizens who do not have access to adequate cooling resources.
- Drought is a serious issue that may profoundly impact agriculture, fish, and wildlife and increase the risk of fire. It may create a situation requiring an emergency declaration but may not warrant an EOC activation.

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- All agencies tasked under this annex will develop and maintain internal operating plans and implementing checklists consistent with the EOP and appendices.

4 Roles and Responsibilities

The roles and responsibilities for each department in support of emergency services will vary depending on the type of resource, the length of the warning period, and the duration of the incident.

4.1 Primary County Agencies

4.1.1 Disaster Management

In a weather emergency, CCDM may be responsible for the following tasks:

- Implement the EOP.
- Activate the Situation Assessment Team.
- Activate the EOC.
- Serve in Unified Command.
- Advise the County Administrator and Board of County Commissioners.
- Facilitate the Emergency Declaration process.
- Staff the EOC Manager position.
- Coordinate with city, regional, and State counterparts.
- Request CARES activation.
- Request support from the American Red Cross.
- Monitor the situation and disseminate information to departments and staff as appropriate.

4.1.2 Fire Defense Board

In a weather emergency, the Fire Defense Board may be responsible for the following tasks:

- Coordinate fire agency response.
- Serve in Unified Command.
- Provide staff for EOC operations.
- Provide life safety/rescue operations.
- Coordinate emergency medical services and care for injured individuals.
- Collect and transmit situational status information to the EOC.
- Assist in short-duration traffic control.
- Assist in warning and evacuation operations.
- Conduct welfare checks.
- Conduct Search and Rescue operations, in collaboration with law enforcement.
- Report damage, road, and weather conditions to the EOC.

4.1.3 Sheriff's Office

In a weather emergency, the Sheriff's Office may be responsible for the following tasks:

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- Coordinate law enforcement response.
- Serve in Unified Command.
- Provide staff for EOC operations.
- Collect and transmit situational status information to the EOC.
- Conduct search and rescue operations.
- Provide traffic and crowd control.
- Coordinate warning and evacuation.
- Provide security.
- Conduct welfare checks.
- Report damage, road and weather conditions to the EOC.

4.1.4 Transportation and Development

In a weather-related emergency, the Department of Transportation and Development (DTD) may be responsible for the following tasks:

- Coordinate public works response.
- Serve in Unified Command.
- Provide staff for EOC operations.
- Coordinate road and bridge inspection and assessment.
- Assist in traffic and crowd control by providing signs, barriers, equipment, and personnel.
- Provide and operate heavy equipment.
- Collect and transmit situational status information to the EOC.
- Report damage, road, and weather conditions to the EOC.
- Assess roads likely to be affected, develop alternate traffic routes, and determine barricade and signage needs.
- Assess emergency transportation routes and determine priorities for maintenance and debris removal.
- Coordinate debris removal from storm drains, roadways, culverts, public rights-of-way, and areas potentially impacting public safety or health.
- Coordinate with utility providers to protect/restore services.

4.2 Supporting County Agencies**4.2.1 Health, Housing and Human Services**

In a weather-related emergency, the Department of Health, Housing, and Human Services (H3S) may be responsible for the following tasks:

- Coordinate health and human services response.
- Serve in Unified Command if significant health response is involved.
- Provide staff to support EOC operations.
- Identify and assist people with access and functional needs.
- Identify critical facilities in at-risk areas.
- Assist in coordinating volunteer recruitment and deployment.

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- Evaluate impact on public health of contaminated potable water sources, disruption of sanitary services, and other environmental concerns.
- Provide public health information to Unified Command/Public Information Officer (PIO) for dissemination to the public.
- Work with the American Red Cross in opening and operating shelters for evacuated persons and services for people with access and functional needs.

4.2.2 Public and Governmental Affairs

In a weather-related emergency, Public and Governmental Affairs may be responsible for the following tasks:

- Provide staff for the PIO and Joint Information Centers (JICs).
- Develop and coordinate a Joint Information System.
- Work with local, State, regional, and federal jurisdictions.
- Gather, prepare, and obtain approval for all communications sent to media, jurisdictions, and employees.
- Establish a call center to reduce demands on 911.
- Ensure that updated information is provided to the public regarding
 - Current weather conditions and forecasts
 - Incident status and response
 - Utility status
 - Routes and detours
 - Traffic conditions
 - Transportation options for those who need assistance, shelter locations and updates
 - Systems for locating family, friends and pets
 - Actions to be taken to safeguard lives and property.

4.2.3 Water Environment Services

In a weather-related emergency, Water Environment Services may be responsible for the following tasks:

- Maintain and control water, sewer, and solid waste systems.
- Coordinate debris removal from storm water facilities potentially impacting operations and maintenance.

4.3 Community Partners**4.3.1 American Red Cross**

The American Red Cross provides and manages shelter and mass care operations for citizens who are victims of disaster, and feeding and support services for emergency responders. The American Red Cross will:

- Activate and operate emergency shelters for displaced citizens as requested by the EOC.

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- Provide feeding, basic health and behavioral health services, and welfare assistance.
- Provide an American Red Cross liaison to the EOC.

4.3.2 Clackamas County Amateur Radio Emergency Services

In a weather-related emergency, Clackamas County Amateur Radio Emergency Services (CARES) may be responsible for the following tasks:

- Request that HAM operators report actual or potential weather hazards and conditions to the EOC.
- Assist with Countywide damage reporting.
- Establish an incident-specific net operations plan.
- Provide redundant communications.

4.3.3 National Weather Service

In a weather-related emergency, the National Weather Service (NWS) may be responsible for the following tasks:

- Provide weather forecasts and warnings of hazardous weather.
- Provide river and flood forecasting and warning service

4.3.4 Utilities

In a weather-related emergency, utilities may be responsible for the following tasks:

- Provide liaisons to the EOC when necessary.
- Restore energy systems.
- Regulate utility usage in times of shortages, as appropriate.
- In conjunction with the EOC Operations Section, determine priorities among users if adequate utility supply is not available to meet all essential needs.
- Regularly report status to EOC to ensure situational awareness for the entire County.

4.3.5 Voluntary Organizations Active in Disaster

In a weather-related emergency, Voluntary Organizations Active in Disaster may be responsible for the following tasks:

- Provide liaisons to the EOC when necessary.

5 Concept of Operations**5.1 General**

Effective response to weather emergencies requires:

- Careful monitoring of weather conditions and forecasts.
- Ongoing assessment of the weather's impact on the County and determination of the areas at greatest risk.
- Close cooperation with cities, special districts, adjoining jurisdictions and private utility providers.

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- Regular contact with the NWS and other weather-related monitoring agencies.
- Advanced planning and preparedness activities amongst response entities.

5.2 Types of Incidents**5.2.1 Winter Storms**

Winter storms, including high winds and ice storms, are among the most common weather incidents impacting the County and often involve heavy accumulations of snow and ice that make travel dangerous or impossible, disrupt transportation of goods and services, damage trees and power lines, and cause widespread power outages. Dangerous road conditions make emergency response more difficult and complicate the evacuation of people from areas at risk and the delivery of personnel, equipment and supplies to damaged areas. Avalanche risk is generally confined to the higher elevations surrounding Mount Hood.

5.2.2 Flooding

Flooding of rivers, streams, and tributaries may occur during periods of heavy rain and/or rapid snow melt (or as a result of a dam failure). The rapid rise of water in a number of rivers and streams would present severe risks to life and property, and any impending flood may require the evacuation of significant numbers of people and animals. Urban flooding and high water from overwhelmed storm water systems can cause property damage, threats to safety, and limit mobility without any direct connection to stream behavior. Landslides are a cascading hazard that may occur as a result of flooding along the riverbeds or excessive rain.

5.2.3 Windstorms and Tornadoes

Windstorms and tornadoes may occur suddenly, leaving little time for people to react and move to safety. Even with ample warning that a windstorm or tornado is likely, its path may be difficult to predict. Damage from these incidents may be extensive and severe, or confined to a narrow path of destruction, but they pose serious risks to life, infrastructure, and property whenever weather conditions make them likely.

5.2.4 Excessive Heat

Periods of excessive heat occur periodically in the summer season and may require activation of cooling shelters to protect citizens. Social isolation of vulnerable populations should be considered as a contributing risk factor.

5.3 Emergency Actions

In slowly developing incidents for which there is advance warning, CCDM may activate the EOC to monitor pending hazards associated with the weather phenomena. If appropriate, CCDM will convene the Situation Assessment Team to gauge the potential risk and determine the appropriate actions the County should take in anticipation of the incident. Depending on the circumstances, the EOC ICS Planning Section may be activated to monitor the developing situation, identify areas likely to be at greatest risk, and develop contingency plans.

Pre-incident operations may include pre-positioning supplies and equipment, identifying sites for sandbag distribution and staging areas, and rotating shifts of personnel to assess rising water levels, ice and snow accumulations, road and bridge conditions, etc. Field personnel will

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continually report current conditions to their dispatch centers and/or the EOC as they provide services throughout the county.

The DTD, Clackamas County Sheriff, and the Fire Defense Board serve as the primary agencies coordinating response to a weather incident. Primary agencies will work within the PIO structure to coordinate information to the public regarding weather conditions and the safety measures the public should take throughout the incident.

During periods of excessive heat, the Department of Health, Housing, and Human Services may identify vulnerable populations and/or facilities, and coordinate with the American Red Cross to establish cooling shelters.

Volunteers may be used to assist in sandbag operations or help with evacuations. Volunteer weather spotters and amateur radio operators may also assist in situation reporting.

Tornados and windstorms happen quickly and will be monitored by CCDM. As the event approaches (if there is any warning) CCDM through the PIOs will provide information to the public regarding conditions and safety measures residents should take throughout the incident. This may be done by using conventional media and social media and emerging web platforms.

6 Direction and Control

6.1 County

Depending on the numbers of people affected, the area and extent of the damages, and the response operations required, the incident initially may be managed from a field Incident Command Post or from Department Operations Centers. As the scope of the damage and response increase, and/or more agencies become involved, overall management of the incident will transfer to the EOC.

When the Incident/Unified Command determines that incident response will require resources beyond those available day-to-day and through mutual aid, requests should be coordinated through the EOC. If time does not permit pre-coordination, the EOC should be notified as soon as possible. If needed resources are not available, the County will request State assistance through an Emergency Declaration.

6.2 Cities

Cities have primary responsibility for the safety and well-being of residents within their jurisdictions and for resource allocation and emergency operations within their jurisdictions. Cities are encouraged to develop EOPs and to work closely with CCDM to integrate preparedness, mitigation, response, and recovery activities. An intergovernmental mutual aid agreement between the County and cities is available to all jurisdictions that choose to participate. This agreement establishes procedures for requesting and providing mutual aid resources in a major emergency or disaster.

Cities may request County assistance through mutual aid or through an Emergency Declaration. All city Emergency Declarations need to be submitted to the County for forwarding to the State, as necessary.

IA 1. Weather Emergencies**6.3 Special Districts**

County officials collaborate with special districts in coordinating emergency preparedness, response, and recovery operations. An intergovernmental mutual aid agreement between the County and special districts is available to all jurisdictions that choose to participate. This agreement establishes procedures for requesting and providing mutual aid resources in a major emergency or disaster.

6.4 Regional

The regional emergency transportation routes receive priority damage assessment, maintenance, and repair to ensure that these major transportation corridors are available to move people to safety and to move personnel and equipment for response operations. (An emergency transportation routes map is available in the EOC Library.)

Clackamas County is a participant in the Inter-County Omnibus Mutual Aid Agreement that provides a framework for counties to request mutual aid from each other in emergencies, saving time and minimizing confusion during an incident.

6.5 State and Federal Assistance

The Oregon Office of Emergency Management (OEM) disseminates information on potentially dangerous weather conditions through the Oregon Emergency Response System.

The NWS is responsible for alerting public agencies and the general public of potentially dangerous meteorological conditions and impending weather emergencies. The NWS will issue alerts, watches, and warnings, as appropriate, when rainfall and/or snow melt may cause rivers to overflow their banks, winter storms are approaching, or windstorms/tornadoes are likely. The NWS forecast for the Portland area may be found at <http://www.wrh.noaa.gov/pqr/>

If incident response requires resources beyond those available to the County on a day-to-day basis and through mutual aid, Incident Command will request additional resources through an Emergency Declaration. EOC staff will forward the declaration to OEM for submission to the governor. OEM coordinates State resources and response and will seek a State declaration if necessary.

7 Incident Annex Development and Maintenance

The primary agencies identified in this annex are responsible for ensuring that this annex and supporting plans and procedures are updated at least annually, after every incident or exercise to which it applies, or as changes occur. CCDM is available to assist as requested.

8 Supporting Plans and Procedures

The following plans and procedures are currently in place:

- SA 1 – Evacuation

9 Appendices

- Appendix A – Weather Incident Checklist

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Appendix A Weather Incident Checklist

The following action items are appropriate to most weather-related incidents; however, the actions should be evaluated for appropriateness in any given situation and additional actions not listed here may be necessary.

Pre-Incident Action Items

- ☐ Maintain and revise, as needed, applicable response plans pertaining to weather-related incidents, including the EOP and agency-specific standard operating procedures.
- ☐ Ensure necessary personnel participate in appropriate trainings and exercises.
- ☐ Ensure that emergency contact lists are updated and establish a pre-event duty roster for the EOC.
- ☐ Prepare, for approval, radio messaging to be used by local radio stations and scripts to be used on local television station(s) for emergency broadcast. Include release instructions and maps as appropriate.
- ☐ Identify private and public agencies, local contractors, and vendors that could be affected by and/or involved in supporting the response to the incident and:
 - Incorporate them into planning and mitigation efforts.
 - Develop memoranda of understanding with appropriate private businesses.
 - Maintain list of contracts and vendors including their names, contact information, and their specialties.
- ☐ Provide public safety information and education programs regarding emergency preparedness and response to the anticipated incident.
- ☐ Work with the Planning Commission to ensure that new construction does not increase vulnerabilities to hazards.
- ☐ Pre-designate emergency transportation routes and alternate routes for areas vulnerable to weather-related incidents.
- ☐ Maintain equipment and supply inventories necessary to support weather-related incidents including communications devices and warning systems.
- ☐ Familiarize staff with requirements for requesting State and Federal Disaster Assistance. [[*Robert T. Stafford Disaster Relief and Emergency Assistance Act*](#) and [*Oregon Emergency Operations Plan*](#)]

Response Phase Action Items

- ☐ All departments should keep CCDM and/or the EEOC (if activated) informed of any major developments that could adversely affect response operations (e.g., personnel shortages, loss of firefighting equipment, etc.)
- ☐ Ensure actions are taken to protect personnel and emergency equipment from possible damage by the incident.
- ☐ Activate the EOC and staff as appropriate to the situation. For larger events that include multiple lead agencies or jurisdictions, establish a Unified Command. Ensure multi-agency coordination.

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- ☐ Develop work assignments for necessary ICS positions (recurring action). [[ICS Form 203: Organization Assignment List](#)]
- ☐ Estimate ongoing emergency staffing levels, establish shift rotation plans, and request personnel support.
 - Consider the need for specialized staff such as engineers, building inspectors, heavy equipment operators, and/or environmental remediation contractors.
- ☐ Dedicate time during each shift to prepare for shift change briefings. [EAP]
- ☐ Notify local, regional, State, and federal agencies/entities which may be able to mobilize resources to support local response efforts. Request liaisons be assigned to the EOC.
- ☐ Confirm or establish communications links among adjacent jurisdiction EOCs, appropriate agency operations centers, and the State Emergency Coordination Center if activated.
 - Confirm operable phone numbers and verify functionality of alternate communications resources, if necessary.
- ☐ Determine the type, scope, and extent of the incident (recurring). Verify reports and obtain estimates of the area that may be affected. Maintain situational awareness and keep command staff, support agencies, adjacent jurisdictions, response partners (e.g., private, non-profit), and liaisons updated on situational changes. [[ICS Form 209: Status Summary](#)]
- ☐ Implement plans and procedures (including agency-specific protocols and standard operating procedures) specific to the incident. Ensure that copies of all documents are available to response personnel as necessary.
- ☐ Activate mutual aid agreements as needed. Activation includes placing backup teams on standby and alerting resource supplies of both potential and current needs.
- ☐ Develop procedures for registering mutual aid, other first responders, and volunteers as they arrive on the scene and receive deployment orders.
- ☐ Conduct damage assessment and develop reports. (recurring)
- ☐ Coordinate repair and restoration of essential services and vital systems and/or maintain situational awareness regarding status (in the case of essential services and vital systems that are the province of the private sector such as electricity).
 - Secure assistance from private contractors and/or vendors as needed.
- ☐ Continuously determine the need for additional resources and request them as necessary through appropriate channels.
- ☐ Submit a request for emergency/disaster declaration, as applicable.
- ☐ Formulate emergency public information messages and media responses utilizing “one message, many voices” concepts. (recurring)
 - Public information should be reviewed and approved for release by the EOC Manager and/or on-scene Incident Commander or designee prior to dissemination to the public.
- ☐ If appropriate, establish a JIC and designate a lead PIO for the jurisdiction.
- ☐ Maintain accurate records for reimbursement requests and historic information reports.
 - All EOC and incident assignments, person(s) responsible, and actions taken should be documented in logbooks. [[ICS Form 214 – Unit Log](#)]

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- All messages, and the names of those sending and receiving them, should be documented on the EOC log.
- Collect records and bills generated during the incident in order to ensure timely submittal of documents for reimbursement.
- ❑ Develop and deliver situation reports (recurring at regular intervals). [[*ICS Form 209 – Incident Status Summary*](#)]
- ❑ Develop and regularly update an EOC Action Plan (EAP) (recurring). [[*ICS Form 202 – Incident Objectives*](#), [*ICS Form 203 – Organization Assignment List*](#), [*ICS Form 205 – Incident Radio Communications Plan*](#), [*ICS Form 206 – Medical Plan*](#), [*ICS 208 – Safety Message*](#), [*Incident Map*](#)]
 - Developed by the Planning Section, and approved by the EOC and/or on-scene Incident Commander, the EAP should be discussed at regular intervals and modified as the situation changes.
 - Ensure objectives and tasks outlined in the EAP are implemented.
- ❑ Ensure that all reports of injuries, deaths, and major equipment damage accrued during response activities are communicated to the EOC Manager and/or on-scene Incident Commander.

Recovery/Demobilization Phase Action Items

- ❑ Develop a Demobilization Plan to assist in an orderly demobilization of emergency operation. [[*ICS Form 221 – Demobilization Plan*](#)]
- ❑ Activate, if necessary, appropriate recovery strategies outlined in continuity operations plans and/or continuity of government plans.
- ❑ Initiate intermediate and long-term recovery planning.
- ❑ Develop recommendations regarding changes in planning, zoning, and building codes/ordinances to lessen the impact of future emergencies related to this type of incident.
- ❑ Release mutual aid resources as soon as possible.
- ❑ Deactivate/demobilize the EOC, agency operations centers, and command posts.
- ❑ Conduct post-incident debriefing(s) to identify success stories and opportunities for improvement.
 - Develop an After Action Report based on these debriefings.
- ❑ Correct any deficiencies reflected in the After Action Report.
 - Revise any applicable emergency response plans based on the success stories and/or lessons learned during the response.