# AP 8B – Natural Event

# Winter Storm

AP Summary:

This Action Plan applies to winter storm events. In general, these events occur with reasonable lead times, and it is possible to take proactive measures, as outlined below. Response and recovery can be time consuming during such events, and they can involve loss of electrical power supply, damage of structures and equipment, disruptions of service, and injuries to utility personnel.

## Initiation and Notification:

When hazardous winter weather conditions are expected to affect the region, the National Weather Service (NWS) issues public advisories. This AP should be initiated upon official notification of a “winter storm watch” or more elevated status. In order of increasing severity, the standard terminology is as follows:

Winter Storm Outlook: Issued prior to a Winter Storm Watch. The Outlook is given when forecasters believe winter storm conditions are possible and are usually issued 3 to 5 days in advance of a winter storm.

Winter Weather Advisory: Issued for accumulations of snow, freezing rain, freezing drizzle, and sleet which will cause significant inconveniences and, if caution is not exercised, could lead to life-threatening situations.

Winter Storm Watch: Alerts the public to the possibility of a blizzard, heavy snow, heavy freezing rain, or heavy sleet. Winter Storm Watches are usually issued 12 to 48 hours before the beginning of a Winter Storm.

Winter Storm Warning: Issued when hazardous winter weather in the form of heavy snow, heavy freezing rain, or heavy sleet is imminent or occurring. Winter Storm Warnings are usually issued 12 to 24 hours before the event is expected to begin.

Blizzard Warning: Issued for sustained or gusty winds of 35 mph or more, and falling or blowing snow creating visibilities at or below ¼ mile; these conditions should persist for at least three hours. It is expected that the local the Local Emergency Planning Committee (LEPC) will carefully and continually monitor meteorological conditions and forecasts. During such events, the Local Emergency Planning Committee (LEPC) shall be in constant contact with the National Weather Service (NWS) and disseminate information to agencies via conference call, e-mail and broadcast fax.

Click on the following link to access the NWS website for current warnings: [NWS](http://www.nws.noaa.gov/)

Notification phone numbers can be obtained from the Organization Contact List in the Appendices as well as from Section III.D of the Emergency Response Plan.

### Equipment Identified

Equipment: (enter list of equipment needed)

Location: (enter location of equipment)

This equipment is available to assist in the execution of this AP.

Specific Activities: (the following are specific activities to be performed)

#### Assess the Problem

Winter storms, accompanied by strong winds and blizzard conditions, have resulted in localized power and phone outages; closures of streets, highways, schools, businesses, and nonessential government operations. People have been isolated from essential services in their homes and vehicles. A winter storm may escalate into a catastrophic event paralyzing municipalities, and rural areas for several days. Life threatening situations may occur in which emergency response agencies cannot perform their duties due to extreme weather conditions. Individual jurisdictions may be over-whelmed and need mutual aid assistance.

##### Isolate and Fix the Problem

Snow removal capabilities will vary widely, general procedures are as follows:

Before the storm:

1. Activate Emergency Operations Center (EOC).
2. Monitor track of storm.
3. Release nonessential personnel, as warranted.
4. Assemble essential personnel and designate duties.
5. Typical duties at this stage may include:
   1. Fill gravity storage tanks.
   2. Test auxiliary power sources.
   3. Fill fuel tanks.
   4. Secure windows and doors.
   5. Mobilize snow removal equipment, as warranted.
   6. Man remote stations essential to operations.
   7. Stockpile chemicals, food, etc.
6. Discuss needs with electric company.
7. Test back-up communications system.
8. Review mutual aid agreements and verify connections to/from neighboring water systems.

Review specific power outage contingency action plan.

During the storm:

1. Notify customers, media, and state and local authorities if service is disrupted or if significant demand management is necessary.

2. Monitor reservoirs.

3. Monitor changes in water quality. If a water quality emergency should develop, follow the appropriate procedure.

4. Open connections with neighboring water systems if necessary.

5. Provide backup power to facilities utilizing mobile generators, as appropriate.

###### Monitoring

In order to monitor the infrastructure status and residents' health during a winter weather event, it is expected that the Utility will assist the Local Emergency Planning Committee (LEPC) in gathering the following types of information:

• Electrical load

• EMS cold-related responses / total responses

• Cold weather-related water main breaks

• Available sheltering centers

• Status of salt and sand stockpiles

• Available snow removal assets

• Cold-related incidents / concerns

During winter weather emergencies, heavy snowfall, coupled with icy roads or ice accumulations on aboveground electrical transmission lines, can result in vehicular accidents and transmission line failure. Power outages during winter weather events can pose serious problems, particularly among those communities where life-sustaining equipment (LSE) is a necessity.

Personnel should avoid traveling by vehicle, but if necessary, it is important to communicate destinations, routes, and expected arrival times. If vehicles get stuck along the way, help can be sent along the predetermined route. If personnel do get stuck:

• Staff should stay with their car and not try to walk to safety.

• Tie a colored cloth to the antenna for rescuers to see.

• Start the car and use the heater for about 10 minutes every hour. Keep the exhaust pipe clear so fumes won't back up in the car.

• Leave the overhead light on when the engine is running to be seen.

Keep arms and legs moving to keep blood circulating and to stay warm and keep one window away from the blowing wind slightly open to let in air.

During heavy storms, search and rescue operations, movement of emergency response agencies to assigned duties and restoration of essential services are likely to become the primary focus of the EOC.

Priorities of response forces, prioritization of the use of snow removal equipment and allocation of all critical resources and response personnel will be the responsibility of the EOC.

Recovery and Return to Safety

It is recommended that staff observe the following safety tips in recovery from winter storm events:

• After the storm, if personnel are required to shovel snow, be extremely careful. It is physically strenuous work, requiring frequent breaks. Avoid overexertion. Heart attacks from shoveling heavy snow are a leading cause of deaths during winter.

• Walk carefully on snowy, icy, sidewalks.

Report of Findings

Assemble relevant personnel to review effectiveness of action plan and reinforce lessons learned.

AP-8B Revision Dates: