

Hazard / Definition

Water Supply/Power Failure:

Interruptions or loss of electrical service or water supply for an extended period of time.

Description / Frequency

Power Supply: There are two classes of power failures: failures internal to the power distribution system and failures from external causes such as severe storms. The devastating effect on power systems by major natural disasters can cause widespread outages over a long period of time. Windstorms, heavy, wet snow, flooding and tornadoes can take down power lines and interrupt service.

Water Supply: Water supply can be affected during periods of insufficient rainfall or snowfall. Many cities depend on reservoirs for their source of water, as well as farmers and ranchers for irrigation needs.

Historical Score: 1

January 1982: A severe windstorm in January of 1982 took down power lines causing power outages.

September 1995: Thousands of homes and businesses were without electricity for several days following a heavy, wet snow storm. Trees and limbs breaking, from the weight of the snow, broke power lines throughout Boulder County.

July 1996: On July 2, 1996, some areas of Boulder County were without power for approximately 3 hours following a massive power outage. This occurred on one of the hottest afternoons of the year with temperatures soaring toward 100 degrees. Parts of 8 western states were affected.

July 1998: During a period of extreme high temperatures, Public Service Company issued an energy "Red Alert" with a warning that rolling blackouts would be possible and asked citizens to cut back on power usage.

There is not a lot of data for information on water supply events, at least where emergency response was required.

During the Spring of 1996 there was a brief time when City of Boulder residents were asked to conserve water. The water supply became critical when repairs were being done at Barker Reservoir which provides much of the City's water.

Mitigation Options / Strategies

- C Citizens and businesses need to take measures before power failures and water shortages occur in order to be better prepared during an emergency. *Some things to include are:*
- C Backup generators for use during periods of power outages.
- C Emergency supplies of food and water.
- C An alternate source of heat.

Method of Warning and Evacuation:

- C SCC Communications and US West partnered together for a warning and evacuation system for Boulder County. It is called the Emergency Warning and Evacuation Service (EWES) and is part of the Emergency Preparedness Network (EPN). The existing 9-1-1 database of telephone numbers and addresses is used in combination with detailed maps to help determine the geographic boundaries of an area impacted. The system is capable of calling up to 2,000 numbers in one minute. It is designed to deliver recorded information to endangered people in advance of a disaster or any major event. Messages can be delivered in various languages, as well as to pagers or the Emergency Alert System (EAS). Multiple floodplain areas can be handled during a single event with priority given to the area most impacted.

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Potential Score: 1

Boulder County is vulnerable to high winds, flooding and periods of drought, so the potential for water supply and power failures always exists.

Impact on Life and Property:

Loss of power or water shortages over an extended period of time, would require emergency response to needs for food, water, heating, etc. Loss of water or electricity could cause life-threatening situations for patients in medical facilities. Other problems that might arise would be: transportation, lack of heating or air conditioning, spoilage of food, work interruptions, polluted water and inoperable sewage treatment facilities. Costs for repair and restoration of facilities would cause economic hardship.

Mitigation Options / Strategies

Revised 2000