

Hazard Analysis for the City of Centerville, Utah

An Examination and Evaluation of the Hazards Affecting Centerville City

City of Centerville; Office of Emergency Management

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Hazard Analysis Process

Identifying the hazards is the first step in any effort to reduce community vulnerability. Hazard analysis involves identifying all of the hazards that potentially threaten a community and analyzing them individually to determine the degree of threat that is posed by each. Hazard analysis determines:

- What hazards can occur.
- How often they are likely to occur.
- How severe the situation is likely to get.
- How these hazards are likely to affect the community.
- How vulnerable the community is to the hazard.

This information is used in the development of emergency response plans, mitigation plans, and recovery plans. It indicates which hazards merit special attention, what actions might be taken to reduce the impact of those hazards, and what resources are likely to be needed.

Hazard analysis requires completion of five steps:

1. Identifying the hazard.
2. Profile each hazard.
3. Develop a community profile.
4. Compare and prioritize risk.
5. Create and apply scenarios.

Hazard Identification

The first step in hazard analysis is to put together a list of hazards that may occur in the community. A community hazard analysis considers all types of hazards. Categories of hazards include natural hazards, such as storms and seismological events; technological hazards, such as nuclear power plants, oil or gas pipelines and other hazardous materials facilities; and civil or political hazards such as a neighborhood that has been the scene of rioting or large demonstrations. Cascading emergencies, situations when one hazard triggers others in a cascading fashion, should be considered. For example, an earthquake that ruptured natural gas pipelines could result in fires and explosions that dramatically escalate the type and magnitude of events.

Hazard Profiles

Each profile includes the following information about the hazard:

- Frequency of occurrence—how often it is likely to occur.
- Magnitude and potential intensity—how bad it can get.
- Location—where it is likely to strike.
- Probable spatial extent—how large an area it is likely to affect.
- Duration—how long it can be expected to last.
- Seasonal pattern—the time of year during which it is more likely to occur.
- Speed of onset—how fast it is likely to occur.
- Availability of warnings—how much warning time there is, and whether a warning system exists.

The following pages contain a profile for each of the hazards identified for Centerville City. Identified hazards in Centerville Utah:

Natural Hazards

Floods
Earthquake
Liquefaction
High winds
Debris Flows / Mudslide
Tornado
Severe Winter Weather
Wildfire
Rockfall
Drought
Thunderstorms

Technological Hazards

Hazardous Materials Incidents
Power Outages
Fallen Aircraft
Terrorism

Hazard Profile

HAZARD: Debris Flows

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Debris flows have occurred in the spring, summer and fall months . Spring debris flows are usually the result of rapid snowmelt or heavy rainfall. Debris flows in the summer and fall are usually the result of heavy rain or severe thunderstorms.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) All four alluvial fan areas in the community are susceptible to debris flows. Mitigation efforts have been taken to reduce the damage caused by a debris flow s by constructing debris basins on Ricks Creek, Barnard Creek, and Parrish Creek. There is no debris basin located on Deuel Creek in Centerville Canyon. Centerville Canyon probably has the highest probability of generating a debris flow, as it has not had a recorded event in the last 150+ years.

PROBABLE DURATION: Events may last from a few hours or may continue for days depending on the size of the event.

POTENTIAL SPEED OF ONSET: (Probable amount of warning time) It may be possible to have some warning as a result of monitoring conditions, such as snow pack and rainfall, that may contribute to a debris flow

Minimal (or no) warning.

6 to 12 hours warning

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: There are no warning systems for debris flows. However, the SNOTEL site and stream gage may be useful in monitoring conditions that may contribute to an event so that warnings may be issued.

More Information About This Hazard

HAZARD: Debris Flows

HISTORIC EVENTS IN CENTERVILLE:

- 1878 Canyon not known, but recorded that an event that caused “inundation of farmlands, destruction of roads, and depositions of large quantities of debris on agricultural land”
- 1923 Barnard Creek
- 1929 Ricks Creek
- 1930 July 10 - Parrish Creek (destroyed several homes, caved in side of school)
September 4 – Parrish Creek (portions of Main Street covered by 15 feet of mud)
Ricks Creek
Barnard Creek



1930 Parrish Creek Debris Flow

NOTE: Debris flows may be considered a cascading event or result from other events. Consideration should be given for such events as wildfire, severe thunderstorm, rapid snowmelt flooding and any activity that alters the landscape such as construction, animal grazing, logging, etc.

WHAT IS A DEBRIS FLOW: Debris flows are often called mudslides, mudflows, or debris avalanches. They consist of debris mixed with water. Debris is mainly soil and anything else, such as trees and rock fragments, that are picked up as the flow moves down a slope or channel.

Debris flows may be generated when hillside colluvium or landslide material becomes rapidly saturated with water and flows into a channel. Intense rainfall, rapid snowmelt, or high levels of ground water flowing through fractured bedrock triggers the movement. Debris flows and floods also occur when heavy rains on slopes cause extensive hillside erosion and channel scour.

Repeated debris flows and/or floods deposit sediment at the mouth of a canyon, forming an alluvial fan. The fan shape is a result of periodic diversion of the main channel back and forth across the fan. Flows may travel farther down the fan from the mouth of the canyon if the channel becomes entrenched and the flow is confined. Alluvial fans are risky places for homes because it is difficult to predict where flooding or debris flows will occur.

Debris flows can be as thick as wet concrete and can transport boulders as large as a car; debris flows may eventually become muddy flood waters as they deposit their debris.

Debris flows tend to move in pulses. Early pulses or previous debris flows form levees that channel the flow until the levees are breached.

The presence of older levees indicates the recurrence and characteristics of debris flows in a particular canyon. This is valuable information for developing land on the alluvial fan. (from Utah Geological Survey Public Information Series 70, by William F. Case)

Hazard Profile

HAZARD: Drought

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Likely to occur over periods of 3-10 years.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Entire community affected by drought conditions.

PROBABLE DURATION: Years

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None

More Information About This Hazard

HAZARD: Drought

HISTORIC EVENTS IN CENTERVILLE:

1896 – 1907 Statewide drought conditions
1930 – 1936 Statewide drought conditions
1953 – 1965 Statewide drought conditions
1974 – 1978 Statewide drought conditions
1988 – 1993 Statewide drought conditions
1999 – 2003 Statewide drought conditions

EFFECTS OF DROUGHT:

- Lowered water levels in reservoirs
- Lower flows in streams
- Fluctuation in levels of the Great Salt Lake
- Less water recharge in aquifers
- Increased demand for wells

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Hazard Profile

HAZARD: Earthquake

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: There are no seasonal patterns for this hazard.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) The entire community will be effected. Areas along the east side of the community near the fault areas are at risk for surface rupture.

PROBABLE DURATION: The initial event will be seconds to minutes. After the initial event, after shocks may occur for hours, days, or even weeks.

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None

More Information About This Hazard

HAZARD: Earthquake

HISTORIC EVENTS IN CENTERVILLE:

No major earthquakes recorded

FREQUENTLY ASKED QUESTIONS:

How often do earthquakes occur? There are hundreds of small earthquakes every year in Utah. Moderate, potentially damaging earthquakes (magnitude 5.5 to 6.5 occur on average every 10 to 50 years. The largest earthquakes expected in Utah are in the 7.0 to 7.5 range, which take place about every 150 years.

Average number of earthquakes occurring in Utah

<u>Magnitude</u>	<u>Frequency</u>
≥3.0	6 per year
≥4.0	1 per year
≥5.0	1 every 4 years
≥6.0	1 every 10 years
≥6.5	1 every 50 years
≥7.0	1 every 150 years

Where and when is surface fault rupture likely to occur? On the Holocene fault on which a magnitude 6.5 (approximate) or larger earthquake occurs. On average, these earthquakes may occur once every 120 years on various faults in the Wasatch Front region; once every 350 years somewhere along the central part of the Wasatch fault (between Brigham City and Nephi); once every 2,000 years at any specific locality along the central Wasatch fault; and once every 5,000 to 20,000 years or more on other Holocene faults in the state.

Hazard Profile

HAZARD: **Fallen Aircraft**

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Can occur at anytime.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Any area may be affected, but those areas that are located in or near commonly used flight paths have a greater chance of being effected.

PROBABLE DURATION:

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning.

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None

More Information About This Hazard

HAZARD: Fallen Aircraft

HISTORIC EVENTS IN CENTERVILLE:

1942 – United Airlines flight crashed in the foothills just east of Centerville. There were no survivors of the crash.

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Hazard Profile

HAZARD: Flood

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Flooding caused by rapid snowmelt will most likely will occur in late spring and early summer. Heavy rain or seasonal thunderstorms may occur in the spring and late summer months. Other types of flooding may occur at anytime.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Areas most likely to be flooded are shown on the city's Flood Insurance Rate Map (FIRM). The FIRM identifies those areas that may be subject to the 100 year flood and the 500 year flood. Most notable are the areas at the mouths of the canyons on the alluvial fan and along the creeks. I-15 and the D&RG Railroad can also create backing which may flood some homes and businesses. (See the FIRM for more detailed information)

PROBABLE DURATION: Can range from minutes & hours to days.

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning.

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None. However, the SNOTEL site and stream gage may be useful in monitoring conditions that may contribute to an event so that warnings may be issued. The National Weather Service sometimes issues flash flood watches and warnings.

More Information About This Hazard

HAZARD: Flood

HISTORIC EVENTS IN CENTERVILLE:

Major Flood Events

1862	May
1878	July
1882	
1896	
1923	August - Barnard Creek
1929	Ricks Creek event
1930	Five separate flood events in a 3 month period
1983	Rapid snowmelt and heavy rains



Flooding in 1983

There have been many smaller events as a result of thunderstorms and microburst storms with very heavy rainfall amounts in short periods of time.

MORE INFORMATION:

More information regarding the flood hazard in Centerville can be found in the Pre-Disaster Flood Hazard Mitigation Plan developed by ESI Engineering, Inc in 1998.

Information is also available on the FIRM and in the two Flood Insurance Studies performed by FEMA in 1981 and 1992.

There have been several other flood studies for the area created by the U.S. Army Corps of Engineers and by Davis County.



Corner of Main and 400 South 1983

Hazard Profile

HAZARD: Hazardous Materials Incident

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Can occur at any time.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Areas located near major transportation routes and manufacturing facilities. These would include I-15, Union Pacific Railroad, Frontage Road, Parrish Lane, and Main Street. Major manufacturing would include Air products, Syro Steel, and most of the business park area west of I-15.

PROBABLE DURATION: Hours.

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning.

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None

More Information About This Hazard

HAZARD: Hazardous Materials Incident

HISTORIC EVENTS IN CENTERVILLE:

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Hazard Profile

HAZARD: High Winds

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Usually occur in the early spring.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Areas located in or near the canyon mouth. Also those areas that are farther away from the canyons along I-15.

PROBABLE DURATION: 1 to 16 Hours

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning.

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None. The National Weather service does issue warnings and watches for high winds. These warnings are available via the internet and by using NOAA weather radios.

More Information About This Hazard

HAZARD: High Winds

HISTORIC EVENTS IN CENTERVILLE:

1963 – High winds tipped over power lines at Smoot Dairy and started fires. 13 barns burned killing over 150 cattle.

1987 – January – 100+ mph winds knocked power out overnight.

1983 – April – Winds over 70 mph – damage to some structures

1997 – January – High winds, trees uprooted

1999 – Winds at 113+ mph – damage to structures – 15 railcars blown off Union Pacific tracks

OTHER NOTES:

During periods of high winds the interstate is often closed to high profile vehicles north of Centerville. This often forces many trucks to pull off the road in the Centerville area. In the past the parking lots of commercial businesses have been used as a temporary location for these trucks to wait for the winds to cease.

Hazard Profile

HAZARD: Liquefaction

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Can occur at any time as result of earthquake or ground shaking.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Areas with sandy loose soils and or/ground water most likely to be affected. Areas west of Main street have a very high probability of liquefaction due to the soil types and the high ground water in the area. Between Main Street and 400 East has moderate potential and East of 400 East has a low probability for the soils to "liquefy".

PROBABLE DURATION: Short periods during or following an earthquake.

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None

More Information About This Hazard

HAZARD: Liquefaction

HISTORIC EVENTS IN CENTERVILLE:

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Hazard Profile

HAZARD: Power Outage

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Can occur at anytime. This hazard may be associated with periods of high winds in the spring.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Entire city may be affected.

PROBABLE DURATION: Hours, maybe days depending on situation.

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning.

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None

More Information About This Hazard

HAZARD: Power Outage

HISTORIC EVENTS IN CENTERVILLE:

1987 – January – 100+ mph winds knocked power out overnight.

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Hazard Profile

HAZARD: Rockfall

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Can occur at anytime. May be the result of or caused by other hazards.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Areas along the east side of the city that back onto the hillside.

PROBABLE DURATION: Minutes.

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning.

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None

More Information About This Hazard

HAZARD: **Rockfall**

HISTORIC EVENTS IN CENTERVILLE:

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Hazard Profile

HAZARD: Severe Winter Weather

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

- Catastrophic: More than 50%**
- Critical: 25 – 50 %
- Limited: 10 – 25 %
- Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

- Highly Likely: Near 100% probability in next year
- Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.**
- Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.
- Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Most common November to March.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Entire area may be affected. Eastside benches tend to have deeper snows than areas to the west.

PROBABLE DURATION: 1 to 5 days.

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

- Minimal (or no) warning.
- 6 to 12 hours warning.**
- 12 to 24 hours warning.
- More than 24 hours warning.

EXISTING WARNING SYSTEMS: None. The National Weather service does issue warnings and watches for severe winter weather. These warnings are available via the internet and by using NOAA weather radios.

More Information About This Hazard

HAZARD: Severe Winter Weather

HISTORIC EVENTS IN CENTERVILLE:

1993 – Very heavy winter snows.

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Hazard Profile

HAZARD: **Terrorism**

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Can happen at anytime.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Most likely to occur in public areas. Possible areas include businesses, churches, government office buildings, schools and other places where people gather, for example Founders Park on the 4th of July. Also, items of infrastructure such as overpasses, bridges, transportation routs (streets, railroads, etc.), the water system, and other utility systems may be affected by acts of terrorism.

PROBABLE DURATION: Hours to days.

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning.

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None.

More Information About This Hazard

HAZARD: **Terrorism**

HISTORIC EVENTS IN CENTERVILLE:

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Hazard Profile

HAZARD: Thunderstorms

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Spring through late fall.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) Any area of the community can be affected. There have been some thunderstorms that have been very concentrated over small portions of the city in the past (microburst storms). Areas located in floodplains, streams or near other flood control structures may be at risk for flooding or flash flooding as a result of thunderstorms.

PROBABLE DURATION:

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning.

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None. The National Weather service does issue warnings and watches for thunderstorms. These warnings are available via the internet and by using NOAA weather radios.

More Information About This Hazard

HAZARD: **Thunderstorms**

HISTORIC EVENTS IN CENTERVILLE:

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Hazard Profile

HAZARD: Tornado

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

- Catastrophic: More than 50%
- Critical: 25 – 50 %
- Limited: 10 – 25 %
- Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

- Highly Likely: Near 100% probability in next year
- Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.
- Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.
- Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Late spring through early fall.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) May occur anywhere in the area.

PROBABLE DURATION: Minutes

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

- Minimal (or no) warning.
- 6 to 12 hours warning.
- 12 to 24 hours warning.
- More than 24 hours warning.

EXISTING WARNING SYSTEMS: None. The National Weather service does issue warnings and watches for tornados. These warnings are available via the internet and by using NOAA weather radios.

More Information About This Hazard

HAZARD: Tornado

HISTORIC EVENTS IN CENTERVILLE:

1970 – Funnel cloud developed and passed just north of the community and touched down in the foothills to the East.

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Hazard Profile

HAZARD: **Wildfire**

POTENTIAL MAGNITUDE (Percentage of jurisdiction that can be effected):

Catastrophic: More than 50%

Critical: 25 – 50 %

Limited: 10 – 25 %

Negligible: Less than 10%

FREQUENCY OF OCCURRENCE:

Highly Likely: Near 100% probability in next year

Likely: Between 10 and 100% probability in next year, or at least one chance in ten years.

Possible: Between 1 and 10% probability in next year, or at least one chance in the next 100 years.

Unlikely: Less than 1% probability in next 100 years.

SEASONAL PATTERN: Most likely to occur from June until the first snowstorms in late October or November.

AREAS MOST LIKELY TO BE AFFECTED: (By sector) The areas of the community adjacent the undeveloped hillside on the east. This includes all homes in the area, not just those that border the wildland area. There is also potential for wildfires on the west side of the community along the borders of the Great Salt Lake.

PROBABLE DURATION: Hours, days, or weeks.

POTENTIAL SPEED OF ONSET: (Probable amount of warning time)

Minimal (or no) warning.

6 to 12 hours warning.

12 to 24 hours warning.

More than 24 hours warning.

EXISTING WARNING SYSTEMS: None

More Information About This Hazard

HAZARD: **Wildfire**

HISTORIC EVENTS IN CENTERVILLE:

Jun 2003	20 acre fire on hillside about 400 South (human caused)
Jul / Aug 2003	500 acre fire in Ricks Creek Canyon (human caused)

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