

Boulder Valley Relocalization Crisis Preparedness Group
Full Results from Step 1 Understanding the Current Reality

This document is an extract from the material presented at
<http://www.ilankelman.org/relocalisation.html>
Please read this document within that context.

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1.1. Local Resources for Crisis Preparedness

Emergency Services Resources in Boulder County

Police

- Colorado State Patrol for vehicle accidents on state and federal roads.
- Boulder County Sheriff for law enforcement in unincorporated areas.
- City police departments in Boulder, Lafayette, Longmont and Louisville.
- Town police or town marshals in Erie, Nederland and Ward.
- University of Colorado campus police.
- Rangers on Boulder open space and mountain parks land.

Fire Service

- 22 fire departments, including municipal departments in Boulder, Lafayette, Longmont and Louisville. Most departments outside the four cities are all-volunteer or a combination of volunteer and some paid firefighters.
- United States Forest Service for wildland fires on federal land in the mountains.

Emergency Medical Care

- Pridemark Ambulance for most of Boulder County.
- Mountainview Fire Department for parts of east and northeast Boulder County.
- Boulder County Paramedics in Lafayette.
- Emergency medical care at Boulder Community Hospital (two medical centers in Boulder) and at smaller hospitals in Lafayette, Longmont and Louisville.
- Air ambulance service from hospitals in Denver and Greeley.

Rescue

- Boulder Emergency Squad in south Boulder County for technical, water and ice rescue and auxiliary service to fire departments.
- Longmont Emergency Unit in north Boulder County for technical, water and ice rescue and auxiliary service to fire departments.
- Rocky Mountain Rescue Group for high-angle rescue in the mountains.

Search and Rescue

- Rocky Mountain Rescue Group, primarily in the mountains for lost persons.
- Front Range Rescue Dogs, a regional resource with search dogs for lost persons, cadavers and urban (collapsed building) search.

- Boulder Composite Squadron, Civil Air Patrol, for missing aircraft, mainly small civilian types. Also available for aerial disaster assessment.
- US Army high-altitude helicopters from Fort Carson in Colorado Springs.

Incident Command

- City of Boulder and Boulder County emergency management office, primarily a planning body.
- Boulder County sheriff's emergency services deputies on major wildland fires, lost person searches and major accidents (air, train, bus, hazmat, etc.)
- Fire battalion chiefs on fires or hazmat incidents.
- Civil Air Patrol mission coordinators on missing aircraft searches.
- Designated search and rescue incident commanders from SAR groups on lost person searches.

Non-governmental Organizations

- Boulder County chapter of the American Red Cross
- Amateur Radio Relay League

Salaries:

- Starting firefighters make about \$43,019 per year. Starting police officers make \$41,604.
- The highest salaries available to firefighters and police officers are in command positions, such as battalion chief (fire) and sergeant and commander (police). In general, those salaries go up to about \$72,000 per year.
- Beyond those senior positions are the top two commanders, the chiefs of fire and police. Depending on how long they've been in their position they can make as high as about \$132,000 per year.
- In all cases, members of the fire and police departments also have access to medical, dental and disability insurance (at least partially and usually entirely paid by the City) and retirement plans.
- Personal equipment (police weapons, firefighter personal protection equipment) is usually provided by the City. Basic uniforms are too, although some firefighters and police officers supplement their uniform items with different type shoes and boots, for example.
- Other municipalities in Boulder County do not pay as much as Boulder does.

1.2. Risks and Vulnerabilities (All)

Each event and condition is followed by two letters in brackets.

- The first letter represents the estimated probability (L low, M medium, H high).
 - The second letter represents the estimated consequences(L low, M medium, H high).
- The combination of probability and consequences defines overall risk.

Disaster events which could affect Boulder Valley

- animals: bear, deer (hitting a vehicle), mountain lion, pets (attacking someone) (HL)
- avalanche (MM)
- blizzard (HL)
- drought (HH)
- disease, non-epidemic (HL)
- disease, epidemic (LH)
- earthquake (LL)

- fire, wild (HH)
- fire, building (HM)
- flood, dam break (LH)
- flood, flash (HH)
- flood, slow-rise / ponding (LM)
- landslide/rockfall (MM)
- near-Earth object strike (e.g. meteorite, comet) (LH)
- space weather (affecting communications, increasing radiation dose) (LH)
- storm (HL)
- temperature extremes: heat/cold wave (HM)
- terrorism, biological (LH)
- terrorism, chemical (LH)
- terrorism, conventional (LH)
- terrorism, radiological (nuclear) (LH)
- transportation incident, road, minor crashes (HL)
- transportation incident, road, major crashes (mainly Route 36) (HM)
- transportation incident, train (MM)
- transportation incident, air (Boulder airport) (MM)
- tornado (MM)
- water supply contamination (MH)
- volcanic ash (LH)
- volcanic eruption in Wyoming (LH)

Examples of events not listed because they are unlikely in Boulder:

- lava, storm surge, tidal bore, pyroclastic flows, tsunami (no bodies of water are big enough)

Other events to consider:

- building collapses (from causes other than the list above, e.g. poor workmanship or material degradation), theft, vandalism, industrial/chemical leak/explosion, gas leak/explosion, radioactive leak.

Disaster conditions which could affect Boulder Valley

- civil liberties erosion (LH)
- corruption (in community, government, and private sectors) (MH)
- creeping environmental changes (HH) although some could be advantageous.
- economic collapse (LH)
- economic recession (MH)
- electricity brownouts/blackouts (HH)
- food quality shortage (MH)
- food shortage (LH)
- government services (e.g. education, health) degrading (HH)
- house prices forcing out lower socio-economic classes (HH)
- injustice in the courts (MH)
- fossil fuel supply reduction (HH) includes possible gas station blockades or panic buying outstripping the supply
- open space threatened with development (LH)
- poverty (LH)
- ecodiversity and habitat loss / species extinction (HH)
- racism (LH)
- unemployment/underemployment (MH)

- waste disposal challenges (HH)
- water rights erosion (MM)
- water shortage (HH)

1.3. Risks and Vulnerabilities (from Peak Oil)

For any event, peak oil could:

1. Limit the government's response capability due to lack of gas and oil, e.g. for snow plows, ambulances, police cars, fire trucks, driver training, and diesel generators for hospitals and emergency operations centers.
2. Limit people's response due to lack of electricity, e.g. for pumping water, indoor temperature control, communications, and private vehicles.

The following disaster events would be particularly exacerbated by peak oil:

1. Blackouts/brownouts:
 - Limits alternative energy sources (e.g. diesel generators).
 - Affects water, waste disposal, food storage, and health care.
 - Could increase potential for industrial failure.
 - Could increase potential for vehicle crashes (e.g. no traffic lights).
2. Dam failure (static or natural hazard induced failures of Barker, Gross, or Boulder reservoir)
 - Limits hydro power.
 - Affects water availability and quality.
3. Disease
 - Diagnosis, treatment and prevention rely on energy-intensive health care infrastructure.
 - Could affect water availability and quality.
 - Could affect local food (plant and animal).
4. Drought (of the type where precipitation and/or ground and surface water are lacking)
 - Limits hydro power.
 - Affects water availability and quality.
 - Could affect local food (plant and animal).
5. Heat wave
 - Limited indoor temperature control.
 - Affects water availability and quality.
 - Could affect local food (plant and animal).
6. Terrorism
 - Highest risk is likely from the civil disorder disaster condition.
7. Winter storms (cold temperatures, snow, ice)
 - Limits road clearance.
 - Limits indoor temperature control which would also affect water supplies.
 - Could affect local food (plant and animal).
8. Wildfire
 - Limits vehicle and aircraft response capability.
 - Limits water transport and pumping.
 - Could affect water quality, alternative energy sources, weather, air quality, and wildlife.
 - Could affect local food (plant and animal).

The following disaster conditions would be particularly exacerbated by peak oil:

1. Civil disorder
2. Civil liberties erosion
3. Creeping environmental changes (recognizing that some might be advantageous)
 - Aridification (desertification is unlikely for Boulder Valley)
 - Climate change.
 - Ecodiversity and habitat loss.
 - Water quality decline.
4. Crime including vandalism
5. Economic decline (need input from BVR Economy Group)
6. Food (need input from BVR Food Group)
7. Health (need input from BVR Health Group)
8. Poverty including declining social services
9. Racism
 - The majority trying to scapegoat minorities.
10. Transport being limited (need input from BVR Transport Group)