

Profile Hazards

The Counties in Region VII Planning and Development Council area do not have a history with a great number of different hazards escalating into disasters. Flooding, winter storms, summer storms and drought are the natural disasters of concern in this region. In Region VII the hazard rated number one by county plans is an outcome of other climatic hazards. Flooding is caused by storms with heavy precipitation, or in other words two of the other top hazards, winter storms and temperate storms, spawn floods. Winter storms include the hazards of heavy snow, ice and wind. Temperate storms include the hazards of heavy rain, hail, electrical, wind and tornados. Tornados do occur in Region VII, but at very low frequency.

Precipitation events are prevalent due to orthographic lift. Orthographic lift occurs when an air mass travels over terrain that is rising (like a mountainside). As a result of the increased elevation, the air mass cools as it rises and the moisture in the air condenses into clouds. When these moisture laden clouds reach a threshold elevation they dump their water load. Most of Region VII Counties are located on the west facing slope of the Allegheny Front. Seasonal prevailing winds from the Great Lakes or Gulf of Mexico push warm moist air up the region's mountains and release precipitation in great quantities. Conversely, communities on the reverse slopes are in a rain shadow and receive no precipitation causing droughts. Areas on the western edge of Region VII do not experience the same amount of precipitation and are also at risk for drought; however, face flooding because the precipitation in the eastern, precipitation prone counties flow through them. Many historic Region VII communities were established along waterways, in the flood plain, and this exasperates the hazard problem.

Power outage is the most debilitating outcome, other than those associated with mass flooding, of all storms that escalate into disasters. While other hazards listed in the preceding section could occur in Region VII, their risk profile is low because damage would be at low levels, the resulting disaster would only affect individuals or extremely small areas. Hazards other than heavy precipitation events become disasters at very low frequencies.

A looming human hazard is the westward mass migration resulting from a chemical, biological, radiological nuclear (CBRN) incident on the U.S. East Coast. A CBRN disaster is different from a hazardous material incident because they are deliberate, malicious human acts designed to kill, injure and create havoc in society on a massive scale. One can expect huge casualties from a CBRN event. Should a CBRN incident occur in the Washington D.C./Baltimore MD area, the population of Region VII counties could grow 10 fold overnight as people flee the attack zone. This would tax the regions' existing rural infrastructure beyond capacity. If a CBRN disaster occurs in Region VII, it most likely would be a cascading outcome of an event outside the local seven county region. Food, water and shelter are important planning areas for this hazard.

Severe Repetitive Loss in Region VII will most likely occur from water damage from a flood or high volumes of surface run off from a precipitation event. Extended droughts will also cause repetitive loss and damage. Other common hazards will cause less severe damage over a general area and many hazards will not escalate into disasters in a human's lifetime. **Therefore, in Region VII it is most cost effective to focus on mitigation for precipitation, lack & abundance, and take an opportunistic approach to other hazard mitigation.**