

APPENDIX E: HAZARDS AFFECTING THE REGION

The National Capital Area has some special characteristics, including varied terrain and geography; the international prominence of the major buildings and monuments in and around Washington, DC; and the mixed distribution of industrial, commercial and office complexes (government and civilian) in the member jurisdictions. Consequently, many types of threats and hazards, with varying probabilities and intensities, may affect the area. For example, meteorological hazards, such as a hurricane, may affect the entire region, but industrial accidents/incidents are more likely to affect those areas within the member jurisdictions that have concentrations of industrial and commercial activity. Although Washington, DC has little industry, and is subject to relatively few natural hazards, it is target-rich for possible civil disorder and terrorist events because of its significant and symbolic structures and monuments.

Hazards and threats may be clustered in the following categories:

Natural Hazards – include naturally occurring phenomena, such as winter storms, thunderstorms, hurricanes, tornadoes, floods, viral epidemics, and extreme heat or cold. The natural hazards most likely to occur locally include urban floods, winter storms, thunderstorms, and hurricanes. Although naturally occurring phenomena, each of these hazards has the potential to cause loss of lives and significant disruption in one or more localities. Further, natural disaster also can cause secondary emergencies, such as hazardous materials releases.

Human-Induced Hazards – include hazardous materials incidents, major traffic accidents, urban fires or explosions, infrastructure disruptions, workplace violence, and civil disobedience or riots. Typically, hazardous materials are present in quantities require to service the residents (e.g., water treatment facilities, dry cleaning establishments, petroleum products, hardware stores, ammunition storage). Illegal storage and use of hazardous materials, such as clandestine drug labs, also may occur.

Major rail line and rail yards are located at the edge of the District. Most motor vehicles carrying hazardous materials in transit to other destinations pass outside the District boundaries, but go through other jurisdiction in the National Capital Region.

Terrorist Hazards – include conventional weapons, incendiary devices, arson, bio-terrorism, cyber-terrorism, and weapons of mass destruction. Terrorist hazards are deliberate and malicious; consequently, the crisis or disaster that results is likely to become an intergovernmental matter more quickly than any other type of disaster.

For not only individual jurisdictions but also for COG, planning for terrorist events has taken on greater urgency since the Sept. 11, 2001 attacks. The creation of the Homeland Security Office at the national level, the recent increase in federal funding assistance to states and localities for terrorism planning and preparations, and the plans for the new federal Homeland Security Dept. all have heightened interest in and capabilities of emergency management.

Some aspects of terrorist events are different from natural and industrial hazards/disasters and will require special emergency planning and management; they include predictability, preventability, controllability, intent/motive/ and identification of the responsible party.

Local Threats and Hazards

The following chart provides a partial listing of the most likely potential hazards that the region faces. Assessments of the vulnerabilities, risks, and likely impacts of each of these hazards/threats pose should be done by each jurisdiction in the NCR as well as collectively for regional planning purposes.

Local Threats and Hazards

Type of Hazard	Likelihood of Occurrence	Potentially Devastating Impact on People	Potentially Devastating Impact on Structures
<i>Natural Hazards</i>			
Floods			
Winter Storms			
Tornadoes			
Thunderstorm			
Hurricanes			
Extreme Heat/Cold			
Viral Epidemics			
<i>Human-Induced Hazards</i>			
Hazardous Materials Incidents			
Transportation Accidents			
Infrastructure Disruptions			
Workplace Violence			
Civil Disorder/ Disobedience			
<i>Terrorist Hazards</i>			
Conventional Weapons			
Incendiary Devices			
Biological and Chemical Agents			
Radiological			
Cyber-Terrorism			
Weapons of Mass Destruction			

Source: *Hazard Analysis and Vulnerability Study*, done under contract to DC Emergency Management Agency, (May 2002)

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