Many parts of the United States face unusual flood-related hazards that cannot be adequately mapped or managed with a ‘one size fits all’ national program. These include the special conditions inherent in many arid regions (alluvial fan flooding, migrating channels, intermittent streams, debris flow, and flooding after wildfires) as well as situations faced in other parts of the country, such as closed basin lakes, ice jams, and flash flooding from mountainous areas.

Because many of the areas prone to these special hazards are not mapped under the National Flood Insurance Program (NFIP), there is little basis for management of the risk unless communities conduct the studies and perform the mapping themselves voluntarily, which most do not. Further, management techniques that are in place for these areas may not be successful in mitigating the special risks.

Mapping of Special Hazards
States and localities need accurate mapping of these unique areas so that appropriate management techniques can be tailored and applied to reduce the risk. The NFIP also needs this accurate mapping to enable the calculation of appropriate flood insurance premiums.

The Federal Emergency Management Agency (FEMA) has recognized that delineation of a floodplain on an alluvial fan cannot be accurately accomplished by using traditional methods of floodplain analysis. Similar assessments, recommended approaches, and decisions need to made about the other special hazards as well.

- FEMA should map special flood-related hazards during the conduct of Flood Insurance Studies and depict them on Flood Insurance Rate Maps.

Management of Special Hazards
As noted above, the NFIP criteria and guidance are largely silent on techniques for local management of special flood-related hazards. The Community Rating System offers incentives to localities that identify and manage unique hazards within their jurisdictions, but a more widespread effort is needed.

- FEMA should require that state and local all-hazard mitigation plans address any flood-related special hazards to which the locale is prone.
- Management and mitigation techniques for special flood-related hazards should continue to be explored, shared, and implemented.