

Application of Flash Flood Information in Natural Disaster Reduction

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In support of the USGS and NASA research on flash flooding in the Southwest, the Flash Flood Laboratory has documented the information needs of local, state, and federal agencies to plan for and mitigate the impacts of flash flood disasters on communities along the Front Range of Colorado and in Arizona. This work focuses on the application of flash flood information generated by physical science research and by GIS mapping efforts.

There is a significant potential benefit to local, state, and federal agencies from the fruits of the physical research. These benefits can be achieved only if they are effectively communicated to end users in a manner that is useful to them. The Flash Flood Laboratory bridges the physical science and user communities to facilitate the transfer of scientific knowledge into societal benefits. We focus on communicating research results from work on early recognition of flash flood potential, flood runoff modeling, and location of risk.

We will present findings from a survey of officials and a flash flood workshop held in Denver in August, 2000. The goals of these efforts is to determine the types of geophysical information required by various agencies, guide researchers to develop information sets to meet those needs, and facilitate the use of new information by agencies to help mitigate the impacts of flash floods. This includes the areas of flash flood mitigation and community planning, emergency response planning, early warning and notification of risk, and emergency response.