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El Paso Floods, Federal Agency Responses and Recommendations

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ABSTRACT

Beginning in late July and continuing through mid September 2006 the Paso del Norte region, consisting of El Paso City and County, Texas, southern New Mexico and Ciudad Juarez, Mexico, experienced a number of record high precipitation events and severe localized and widespread flooding. Intense, localized storms with up to 30 inches of rainfall were reported in some parts of the El Paso metropolitan area. Local and widespread flood events continued over a period of more than a month causing extensive and costly damage to infrastructure, homes, businesses and other property. Portions of this large region were declared Federal Disaster Areas. During these flood events the U.S. International Boundary and Water Commission gauge and telemetry system temporarily failed in reporting river levels necessary for flood management and decisions on the need for evacuation. At the same time there were unconfirmed reports of a possible dam breach across the river in Juarez. The El Paso County Water Improvement District No. 1 and Elephant Butte Irrigation District assisted greatly by providing timely reports of flows and lowering river levels by diverting flood waters into their canals and drains. However, the floods also caused severe damage to river and irrigation district control structures, monitoring gauges, canals and drainage systems. This paper focuses on federal agency and irrigation district experiences, observations, preliminary assessment of events and management responses and the recommendations arising from these floods. Among the recommendations are the need for improved agency and public communication, additional weather and gauging stations, telemetry and coordinated/centralized access to real-time monitoring data, river and levee rehabilitation and maintenance, funding for river and diversion canal infrastructure repairs and improvements, fresh analysis of storm severity and probable recurrence frequency, review of FEMA flood risk maps, and integration of the storm drain system in flood planning. Insight gained from the experiences of these events will also help lay the groundwork for improved future flood planning and management. These experiences and recommendations go beyond this region, and also apply and will benefit other areas in flood planning and coordination of responses and management.

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