

IMPORTANCE OF HCFCD'S NEAR REAL TIME MAPPING PROGRAM DURING DISASTERS

Ataul Hannan,P.E, CFM

Director, Planning Division, Harris County Flood Control District
9900 Northwest Freeway, Houston, TX 77092

Abstract

With the ever increasing abilities provided to the hydrologist through the use of better technology, it has now become possible to link various programs to map flooding events in real-time. Currently, the Harris County Flood Control District (HCFCD) developed an in-house tool for the purpose of monitoring flood events as they happen. The product includes links between rainfall information from gages, hydrologic and hydraulic models, and GIS mapping in an effort to transfer incoming rainfall data into expected flood inundation maps.

It is the ultimate goal of this project to continuously update the hydrologic and hydraulic models used in this system to allow the HCFCD to identify the effectiveness of various flood control projects in the Houston metropolitan area. When further linked to structure inventories developed by the HCFCD, this tool aid in rapidly defining an estimate of the number of structures potentially damaged during a flood.

The purpose of this paper is to present information that can be gained from a near real time mapping program such as the one described, as well as to gain understanding of the technology and capabilities that are currently available for the purpose of developing better floodplain management tools and practices