

Flooding and Funding in Harris County, Texas

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The Harris County Flood Control District is a special purpose district charged with devising, implementing flood damage reduction projects, and maintaining the primary drainage infrastructure. The District has an aggressive capital improvement program which the current annual 5-year plan calls for spending nearly \$800 million. The District is also participating with the Federal Emergency Management Agency in a \$21 million study to develop new Flood Insurance Rate Maps for the entire county which will be released in summer 2003.

THE DISTRICT: The Harris County Flood Control District is a special purpose district created by the Texas Legislature in 1937 in response to devastating floods that struck the region in 1929 and 1935. The District's boundaries are coincident with Harris County, a community of more than 3.7 million that includes the City of Houston. Nature gave us 22 primary watersheds within the county's 1756 square miles, each with its own independent flooding problems.

The District's mission, in simple terms, is to: 1) Devise the stormwater management plan; 2) Implement the plan; and 3) Maintain the infrastructure. The District's drainage and flood control infrastructure is extensive, including more than 1,500 channels totaling about 2,500 miles in length (about the distance from Los Angeles to New York). Nature also challenges us with flat terrain, clay soils that do not absorb water well, and annual rainfall of 48 inches. The flooding problems in the community are severe, with several hundred thousand homes and businesses in the identified flood plain (not all flooding areas are mapped yet), and projects to reduce the risk are estimated in the billions of dollars.

The District's income is derived primarily from a dedicated ad valorem property tax. The rate is variable depending on funding needs, and in 2002 was set at just under 4.2 cents per \$100 valuation (the statutory limit for the District's tax rate is 30 cents per \$100 valuation). Capital projects were funded on a Pay-As-You-Go (or cash) basis for almost a decade. In 2001, an innovative approach to funding the district's future capital project needs was adopted by Commissioners Court that provides funding at levels four to five times higher than any time in the past. The annual 5-year Capital Improvement Program proposed for the FY2003-04 budget calls for \$796 million in projects, which comes from a combination of local and Federal funds. The first year of the plan provides for \$202 million in projects.

Through aggressive privatization and managed competition, the District has reduced its full time staff to about 380, down from nearly 1,000 in 1989. We obtain virtually all engineering design work for capital projects and maintenance repairs through consulting contracts, and we obtain all construction work through the competitive bidding process.

Over 90% of the District's routine maintenance is performed through contracts with private companies.

The District's Mission Statement is: "We strive to provide flood control projects that work, with appropriate regard for community and natural values." This balancing act is a continual challenge in what is now the third most populous county in the United States, and achieving needed flood control within financial limitations is the major component of the District's commitment to make every taxpayer dollar count.

CAPITAL PROJECTS: The district continues to make strong advances in implementing its flood damage reduction program with the funding commitment made by Commissioners Court in 2001. The overall 5-year CIP funding from all sources (not including Corps of Engineers construction) totals \$796 million, of which \$608 million is from HCFCD sources. Highlights for the 2003-04 fiscal year include:

- Home buyouts related to Tropical Storm Allison will continue at a rapid pace;
- New flood plain information will be released through our cooperative effort with the Federal Emergency Management Agency;
- Initiate a 12-month process to develop Watershed Stormwater Management Plans for all watersheds to define flood damage reduction strategies. These studies will provide the necessary information for long-term planning of the HCFCD CIP schedule as well as serve as the foundation for project implementation;
- Continue existing and establish new projects with the Corps of Engineers on Brays, Sims, White Oak, Hunting, Greens, Halls, and Buffalo bayous, and Clear Creek;
- Flood damage relief for Halls Bayou will begin with stormwater detention construction and more land acquisition; and,
- Numerous other projects in virtually all areas of the County that will make a real difference in the risk of flooding.

TROPICAL STORM ALLISON RECOVERY PROJECT (TSARP): The TSARP mission statement is: "To assist residents of Harris County in recovery from Tropical Storm Allison and minimize damages from future floods by investigating the flood event and by developing current, accurate, and timely flood hazard information."

TSARP is a joint study effort by the Federal Emergency Management Agency (FEMA) and the Harris County Flood Control District (the District). The purpose of the TSARP project is to develop technical products that will assist the local community in recovery from the devastating flooding, and provide the community with a greater understanding of flooding and flood risks. An end product of the study will include new Flood Insurance Rate Maps, with new delineations of Special Flood Hazard Areas. The new Flood Insurance Rate Maps will be released in the summer of 2003 for public review and comment, and should be finalized within one year of the release.

Using current state-of-the-art technology, TSARP will yield many products that will help us better understand our flood risk. These products will assist citizens in making important decisions, and will assist public agencies in infrastructure planning. The end result of TSARP will be a more informed and disaster resistant community-and one that is better prepared for the next "Allison."