



## Harris County Flood Control District Fact Sheet

**BACKGROUND** Shortly after the establishment of Houston, along the banks of Buffalo and White Oak Bayous, it became apparent that the area was naturally flood prone. It took two devastating floods in 1929 and 1935 to bring about serious action for major flood relief. In response, the Harris County Flood Control District (HCFCD) was created by the Texas Legislature in 1937. Originally, HCFCD was given the responsibility of overseeing rivers, streams, tributaries and flood waters "for domestic, municipal, flood control, irrigation and other useful purposes." Although its primary function was to serve as the local partner for the U.S. Army Corps of Engineers, HCFCD has gradually taken on a much more complex role.

**MISSION** The mission of the HCFCD is to: Provide flood damage reduction projects that work, with appropriate regard for community and natural values.

HCFCD accomplishes its mission by:

- 1) Devising the flood damage reduction plan;
- 2) Implementing the plan; and
- 3) Maintaining the infrastructure.

**OVERVIEW** HCFCD's jurisdictional boundaries are set to coincide with Harris County, a community of more than 3.7 million people that includes the City of Houston. The other boundaries in which they operate - those provided by nature - are of the 22 primary watersheds within Harris County's 1,756 square miles. Each has its own independent flooding problems and presents unique challenges.

**HCFCD TOOLS** The HCFCD utilizes a number of techniques, or primary "tools," to reduce flood damages throughout the county. These tools are implemented in flood damage reduction projects and include:

- **Channel Modification** (also called Conveyance Improvements) is a man-made change to a channel's characteristics, typically for the purposes of reducing flood damages by increasing its overall conveyance capacity. This can be accomplished by widening and/or deepening the channel, reducing the friction by removing woody vegetation, or by occasionally adding concrete lining.
- **A Stormwater Detention Basin** is another structural tool used by the HCFCD when implementing a project. It is a large, usually excavated area of land, frequently adjacent to a channel, which is designed to receive and hold above-normal stormwater volumes. The detained

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stormwater then slowly drains over time out of the detention basin as water surface elevations in the receiving channel recede.

- **Construction of a Bypass Channel** could also be a man-made change to a channel's characteristics. However, rather than necessarily increasing a channel's capacity, a bypass channel diverts excess stormwater "around" an area with restricted right-of-way or an area with sensitive environmental values. Specifically, bypass channel construction involves building a new channel that is attached to an existing channel and conveying the excess stormwater runoff around its original path. Bypass channels usually "short circuit" the meander or curve of a bayou and are usually constructed in conjunction with downstream channel modifications or a detention basin.
- **Bridge Modification** is another structural tool used in flood damage reduction. It involves the replacement, extension or modification of a bridge in order to remove an impediment to flow within a channel and/or accommodate channel modifications. It can also lessen the likelihood of debris snagging on the bridge piers. If done in conjunction with channel modification, a bridge modification is typically completed first.
- **Buyout** is one of the most effective tools and involves no construction whatsoever. It involves buyout and demolishing of structures that were built deep in flood prone areas where structural projects to reduce flood levels are impractical. Structures in this situation were typically built years ago before detailed floodplain maps and studies were available and before floodplain management regulations were adopted by the county and cities in the county. Once a flood prone house is bought and demolished, it will never incur flood damages again. HCFCD actively pursues voluntary buyout opportunities.

### FUNDING & FINANCES

The HCFCD's income is derived primarily from a dedicated ad valorem property tax. The rate is variable, depending on funding needs. Capital projects have been funded on a Pay-As-You-Go (or cash) basis for most of the last decade, but in 2001, an innovative approach to funding HCFCD's future capital project needs was adopted by the Harris County Commissioners Court that provides funding at levels four to five times higher than any time in the recent past. This new funding approach enables an even more aggressive implementation of flood damage reduction projects across Harris County.

### FOR MORE INFO

For more information on HCFCD, please visit [www.hcfcd.org](http://www.hcfcd.org). The site was developed to serve as a resource for Harris County residents, businesses and property owners and to provide the most current information on flood damage reduction projects in their community. Individuals may also contact the Harris County Flood Control District at 713-684-4000.

