

STORM DRAINAGE SYSTEM

The Storm Drainage Facilities Improvements Program consists of four major components:

- The Storm Water Management Program (SWMP), which is to reduce the risk of structural flooding by protecting properties from flood damage during a 100-year (1% probability) rainfall event. The program targets local drainage systems and integrates with the primary drainage channels and bayous, which are the responsibility of the Harris County Flood Control District (HCFCD). The FY2009-2013 SWMP projects include the continuation of drainage improvements in the TMC as well as several other projects. This includes: Rustling Oaks; Edloe; Whiteheather and Kirby Relief Phase IV. FY2009-2013 SWMP construction projects total approximately \$204 million.
- The Localized Drainage Improvements Program, which consists of small drainage improvement projects, typically less than \$500,000.

There is a backlog of small drainage issues which when resolved can protect many homes from structural flooding. In many cases one section of pipe, a missing overflow section, or inadequate inlets are the only improvements needed to solve the problem. A quick solution will resolve the problems of an otherwise adequate system. On-call engineering and construction contacts will be used to address these problems quickly and cost effectively. The FY2009-2013 program totals approximately \$15.5 million.

- The Comprehensive Drainage Plan (CDP), which prioritizes projects based on specific criteria such as the number of reported structural flooding incidents and repetitive loss properties, has identified more than \$2 billion of inadequate systems in the City to be upgraded. This program prioritizes, scopes, designs, and constructs solution to the inadequacies identified for this long-term program.

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- The projects selected to start this program have the highest numbers of flood-damaged properties by drainage area. Each project will be designed to keep the localized drainage in the piping or street sheet flow system to protect the structures from flooding during the 100-year rainfall event. Properties within a riverine 100-year flood zone will be protected from local drainage flooding, but may not be protected from the riverine flooding until the Harris County Flood Control District projects are completed. Funding for these projects total approximately \$100 million.
- Street reconstruction projects sponsored by TxDOT require the local sponsor (City of Houston) to pay for storm drainage improvements associated with its street reconstruction projects. The FY2008-2013 program has identified approximately \$4 million to support these projects.

Projects supported by Community Development Block Grants (CDBG) funding includes \$4 million in FY2009-2013. Eligible projects identified for CDBG participation includes: Braes Boulevard and Academy Street (M-0255), Astoria and Flushing Meadows (M-0276), and Riptide Area (M-0283).

In summary, the FY2009-2013 Storm Drainage Facilities Improvements Program totals \$281.3 million and is funded primarily by general obligation debt including voter-authorized bonds and commercial paper. Other funding sources include County and State participation, and federal grants (CDBG and FEMA), for \$14 million.