

## Terry Hershey Park Surveying Contract

### Upper Buffalo Bayou Watershed - Situation

Flooding from moderate to severe rainfalls affects many property owners in the upper Buffalo Bayou watershed. For example, in April 2009, more than 900 residences between Eldridge Road and Beltway 8 flooded from a storm that dropped approximately 10 inches of rain over a two-day period. While, in most cases, the flooding was not directly caused by Buffalo Bayou coming out of banks, the bayou's limited conveyance capacity caused many internal drainage systems to back up into neighboring streets. Engineering, environmental considerations, and public sentiment dictate that expanding Buffalo Bayou's stormwater conveyance capacity (widening and deepening the channel) is not a viable option; however, the Harris County Flood Control District has identified stormwater detention as a practical flood damage reduction option.

In 2011-2012, the Flood Control District identified the need for as much as 1,300 acre-feet of stormwater detention volume on Buffalo Bayou upstream of Beltway 8 during its "Charting Buffalo" visioning process. Included in the draft Charting Buffalo report are several options for providing appropriate stormwater detention in the upper reaches of Buffalo Bayou, including the concept of developing appropriate stormwater storage areas in Terry Hershey Park. It is estimated that approximately 280 acre-feet of storage volume could be achieved along Flood Control District right-of-way between Highway 6 and Beltway 8 by developing pockets of detention storage along the overbanks of the bayou.

As a responsible steward of public funds, the Flood Control District investigates opportunities for flood damage reduction on property it already owns before looking to purchase additional property. Before making any decisions about constructing stormwater detention in this area, the District would conduct more detailed environmental evaluation and public outreach.

### Historical Perspective - Flood Control Projects

Buffalo Bayou is an iconic waterway, and the history of flood control projects in Harris County is intertwined with the region's development. The U.S. Army Corps of Engineers' 1940 Final Project Plan, known as the first "flood control" plan for Houston and Harris County, included seven proposed main features: 1) Addicks Reservoir, 2) Barker Reservoir, 3) a Cypress Creek Levee to eliminate natural overflow to Addicks Reservoir, 4) White Oak Reservoir, 5) a North Canal to route water around downtown Houston to the San Jacinto River, 6) a South Canal to route water around downtown to Galveston Bay, and 7) partial channelization of Buffalo Bayou east of Barker Reservoir to the point of diversion to the South Canal (Rummel Creek confluence and where the Sam Houston Tollway is today). Only Addicks and Barker reservoirs and the channelization of Buffalo Bayou to the point of the South

Canal were completed. The Cypress Creek Levee, White Oak Reservoir and North and South canal projects were not constructed primarily because World War II stopped virtually all major civilian construction projects unrelated to the war effort, coupled with the extensive war/post-war urban growth that occupied planned project lands.

Construction on the Barker Reservoir began in 1942 and ended in 1945, and the Addicks Reservoir was constructed between 1946 and 1948. They were designed to protect downtown Houston from stormwater runoff resulting from severe rainfall in the upper Buffalo Bayou watershed. The Addicks and Barker dams each had five outlets, four of which had no gates and were always open to allow water to flow into the channelized section of Buffalo Bayou to the planned South Canal (which was never built). Because the South Canal was never constructed, additional gates were added over time to reduce the flows into Buffalo Bayou and required the reservoirs to hold water longer than intended.

In conjunction with the reservoir construction, Buffalo Bayou was widened and straightened for 6.2 miles downstream of the Barker Reservoir to the point of the proposed South Canal. Almost all of the trees along this reach of the bayou were removed as part of the project.

In 1954, Congress authorized a plan for the Corps to channelize and partially concrete line Buffalo Bayou downstream of what is now the Sam Houston Tollway; however, the project was never implemented because of pressure from community and environmental interests to allow the bayou to remain in its natural state.

The land acquired by the Corps for completion of the 6.2 miles of Buffalo Bayou channelization (approximately 500 acres) was sold to the Flood Control District in the 1960's. After the gates were added to the dams and the channelization abandoned, there was no longer a need to convey high flows through the channelized reach of Buffalo Bayou. As a result, the land received little maintenance and naturally reverted to the conditions that exist today.

### Flood Control District Right-of-Way/Terry Hershey Park

In 1993, "Terry Hershey Park" was initiated through an agreement between the Flood Control District and Harris County. This agreement allows Harris County (Commissioner, Precinct 3) to construct, operate and maintain trails and other park-related amenities on Flood Control District right-of-way along Buffalo Bayou between State Highway 6 and the Sam Houston Tollway. Park amenities have been created alongside the stormwater detention basins located north of the bayou. The Flood Control District still owns the property for the purpose of flood damage reduction, which include maintenance and implementation of projects and those uses are.

In the 1990s, the Flood Control District constructed approximately 100 acre-feet of detention on the north side of Buffalo Bayou between Dairy Ashford Road and N. Wilcrest Drive. The excavated areas were sculpted around significant environmental features (such as riparian and upland forest and archaeological sites). The excavated areas were also constructed above the level the bayou rises to when the Corps is releasing reservoir flows so that they would remain useable except during flood events.

The Flood Control District's regard for community sentiment and environmental considerations means that additional evaluation and public outreach will be conducted before any decisions are made regarding the construction of stormwater detention basins on both sides of the bayou in Terry Hershey Park. To that end, the District has initiated a surveying contract to gather data about vegetation and environmental features in this area. After the survey is completed, the District will share information about survey results with the community and interested stakeholders in order to determine a path forward.

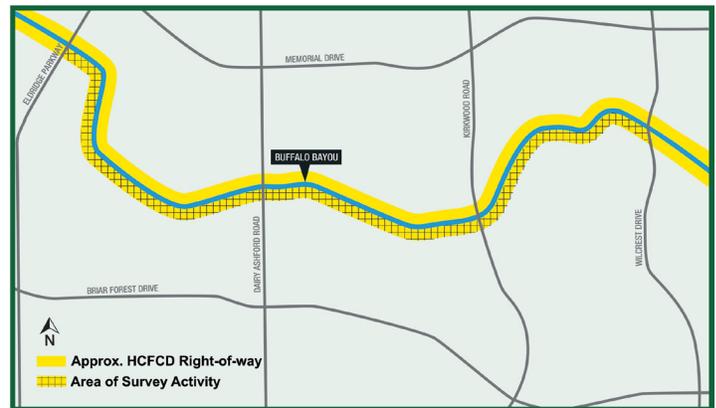
### Survey Scope

The Flood Control District's Terry Hershey Park surveying contract was approved by Harris County Commissioners Court on November 12, 2013. As part of the contract, the Flood Control District through its consultant, Brooks & Sparks, Inc., and their surveyors, West Belt Surveying, Inc., is surveying existing vegetation and topography along the north bank of Buffalo Bayou between N. Eldridge Parkway and N. Wilcrest Drive. The entire survey area covers approximately 150 acres.

As part of this survey effort, the Flood Control District is cataloging individual trees, understory, and natural ground elevations. The survey is limited to land within the Flood Control District right-of-way along the south side of Buffalo Bayou. The information gathered will be used to develop a management plan for the right-of-way that considers multi-use objectives, including flood damage reduction, forest conservation and recreation. Community outreach will be an integral part of process. The Flood Control District is also verifying its right-of-way boundary as part of this effort.

This surveying effort is limited to data gathering and is not associated with any imminent construction. The Flood Control District has no funds programmed for design or construction of a stormwater detention basin project on upper Buffalo Bayou. If and when any action is taken, the District would minimize disturbance to the natural environmental to the extent possible.

The above map illustrates the area the Harris County Flood Control District will be surveying between N. Eldridge Parkway and N. Wilcrest Drive as part of the Terry Hershey Park Surveying Contract. The section marked in yellow depicts Flood Control District right-of-way on both sides of Buffalo Bayou; and the yellow hatch-marked section depicts the area in which the Flood Control District's contractor will be surveying existing vegetation and topography.



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### Next Steps/Community Outreach

The Flood Control District remains dedicated to providing accurate information to the public regarding the purpose of the topographic and vegetation survey.

Upon completion of the survey, the Flood Control District plans to make the survey results available in an electronic format, to post the information on the District's website at [www.hcfcf.org](http://www.hcfcf.org), and to provide information and gather feedback at one or more community meetings.

If specific flood damage reduction projects are considered in the future, the Flood Control District will conduct additional environmental investigations and public outreach before proceeding.

### About the Harris County Flood Control District

The Harris County Flood Control District provides flood damage reduction projects that work, with appropriate regard for community and natural values. With more than 1,500 bayous and creeks totaling approximately 2,500 miles in length, the Flood Control District accomplishes its mission by devising flood damage reduction plans, implementing the plans and maintaining the infrastructure. To learn more about the Flood Control District, visit [www.hcfcf.org](http://www.hcfcf.org)

### Contact Us

For more information on the Terry Hershey Park surveying effort, and the opportunity to sign up to receive regular e-mail updates, please visit [www.hcfcf.org/THPSurveyingContract](http://www.hcfcf.org/THPSurveyingContract); or contact the HCFCF Project and Study information line at 713-684-4040.