

## **Executive Summary**

The East Aldine Management District has made great strides in the area of water and sanitary sewer infrastructure since its formation in 2001. To date, the District has been able to construct or is in the process of constructing over \$43 million worth of water and sewer infrastructure that is providing new water and sewer service to over 1,336 homes and an estimated 3,600 residents of Aldine. Of the \$43 million, approximately 60% (or \$26 million) is from CDBG and TWDB grants obtained by the District and Harris County. The other 40% (or \$17 million) has come from the District through its general fund or through bonds issued by the District.

## **Background**

The initial evaluation of the East Aldine area in the late 1990s revealed that over 4,500 single family homes relied on shallow, private water wells as their source of drinking water and traditional septic tank systems for wastewater disposal. Had these neighborhoods been located within the City of Houston, state law would have required that the City provide municipal water and sewer service to these residences; however, being unincorporated, the neighborhoods and homes had no way of accessing those services. Upon its creation, the first effort of the new board of directors was to initiate a master planning study for the District (primarily funded by a grant from Texas Water Development Board) which was completed in 2004 and identified over \$200 million in needed water and sewer infrastructure improvements in the District. The study laid out a system of major water transmission and regional wastewater infrastructure (lift stations and treatment plants) that would need to be funded to fully service the District. The study also identified 11 distinct "Service Zones" in the District.

Given the high cost to fully implement the plan and with no ability to tax or access grants large enough to fund the major infrastructure, the District quickly realized that the focus of its water and sanitary sewer program needed to be smaller and neighborhood based. Projects needed to be smaller in scale so they would qualify for Community Development Block Grants (CDBG); therefore, the District chose to shift the focus from major water and sewer infrastructure to providing water and sewer services to Service Zones (or specific areas or neighborhoods within Service Zones) with the highest need based on failure rates of conventional septic tank systems and prevalence of private water wells.

A pilot project was proposed for the Tasfield neighborhood, a three street subdivision located on the edge of the District near US Highway 59 and Little York. A \$1.0 million CDBG grant was secured through Harris County, and the District matched the grant with \$250,000 of its own funds. However, the District did not have a place to convey the wastewater once the sanitary sewer collection system was constructed. Over the course of twelve (12) months, the District successfully negotiated an agreement with the City of Houston that provides water and wastewater treatment and conveyance capacity for District projects that can access the City sanitary sewer system, at no cost to the District. The new customers would be hooked-up and pay the same water and sewer rates as City residents. The agreement also provided that if the systems were designed and built to City of Houston standards, the City would accept the water and sewer lines into its system whereby they would be maintained by the City. This was the first agreement of its kind that the City had entered into and represented an important partnership with the District. Not only did the City agree to accept the customers as if they lived in the City, the agreement alleviated the District of having to maintain the water and sewer lines, a burden that would drain resources away from additional projects and plans.

The Tasfield project was successfully completed in 2007, and nearly every one of the 100 eligible residents connected to the new sewer system and abandoned their septic tanks. Having felt the success of the Tasfield project, the District took on a much larger project in 2008 in the North Houston Heights neighborhood. North Houston Heights was the original poster child for the water and sewer deficiencies in East Aldine. The \$6.15 million project was much larger and more complicated than Tasfield, and required a new partnership this time with Sunbelt Fresh Water Supply District. The initial \$1.0 million of the project went to upgrade the Sunbelt sewer system in order to make capacity available for North Houston Heights. Once completed, the actual water and sewer lines were laid in the neighborhood and again, nearly all of the eligible residents chose to connect.

One of the largest "unserved" areas in the District is the area bounded by US 59 on the west, Hirsh Road on the east, East Mount Houston on the north, and Langley Road on the south. The interior of the service zone contains over 1,000 single family homes that exist on private water wells and septic tanks. This area, known as "Service Zone 11" has been identified as an area of high need based on these criteria. A more in-depth engineering study of Service Zone 11 was commissioned by the District and estimated that it would cost approximately \$18 million to construct water and sewer lines to serve the area. Because CDBG grants are only available to fund neighborhood level water and sewer systems, the District knew it needed a large amount of capital to put in the master water and sewer lines that would ultimately service the neighborhood level systems and provide service for commercial development along the freeway. The District prepared a bond application to the Texas Commission on Environmental Quality to fund the major water and sewer lines (trunk lines) that were the necessary first step toward providing service to this Service Zone. The cost for the trunk utilities was estimated approximately \$7 million, and \$5.8 million in bonds were issued for the water and sewer trunk line construction. Construction on this project began in late summer 2011, and was completed in eighteen months. The trunk lines now provide tie-in points for all neighborhood systems that will be funded with CDBG and Texas Water Development Board grants.

Thirteen (13) water and sewer projects have now been completed or planned in Service Zone 11 along with the \$10.4M project for the Sherwood and Benton Place neighborhoods that is 94% grant funded by the TWDB EDAP program. Eligibility for this grant was made possible by a change in state law in 2005 that made East Aldine eligible for "colonia" grants that were previously reserved for neighborhoods along the Texas/Mexico border.

All told, the District has approximately \$43 million in water and sewer projects in its current water and sewer capital plan and plans to add over \$35 million more in coming years. Once complete, an estimated 2,500 homes and hundreds of businesses will have access to safe drinking water and reliable sewer service.