



July-August-September 2010

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**FLEET MANAGEMENT**

Fleet Management performs all related activities to economically meet the transportation requirements of the Harris County Flood Control District (District). Fleet Management manages all equipment purchases, administers a comprehensive preventative maintenance program on all District equipment and operates the Distribution Center.



*North Service Center Fleet Maintenance Shop.*

The District currently owns 173 vehicles, which is up by three vehicles from last year. The District added three vehicles to its fleet for exclusive use by the Alert Team (emergency personnel), which was reassigned back to the District. The District evaluated the condition of the fleet and found all vehicles to be in good operating condition. Due to the good condition, the District chose not to replace passenger vehicles for its fleet this past year. The District anticipates purchasing a few replacement passenger vehicles in 2011.

The District is very conscious of the importance of preventative maintenance of its vehicles. Repair and maintenance costs only increased by a half percent when compared to the same time period in 2009 when performing regular preventative maintenance. The District's goal is to get full usage from each vehicle and to transfer under-utilized vehicles in the fleet to where there is a greater need.

Fuel prices increased this year but not substantially as in previous years. Since fuel prices fell to nearly \$2.00 per gallon in early 2009, prices have steadily climbed, a trend that will probably continue through 2011. Due to the climbing fuel prices, the District anticipates that fuel cost will increase substantially next year, however, the District is currently saving \$.10 to \$.15 per gallon by purchasing fuel for the gasoline storage tanks located at both service centers instead of purchasing fuel for individual vehicles. There is also a labor cost savings for field personnel in regard to less paperwork, fewer vendor issues and less time in general for crew members stopping for fuel.

**FLEET MANAGEMENT (continued from page 1)**



*South Service Center Mechanics Shop.*

Fleet Management also supports the District through its Distribution Center. The Distribution Center is the central facility for accepting and dispensing supplies, mechanical parts and other consumable items used by the District. Currently, the Distribution Center's inventory is valued at approximately \$180,000. The District's goal is to

keep the Distribution Center's inventory as low as possible but still be able to provide the needed items in a timely fashion. This is accomplished by using a combination of the District's inventory and a vendor's inventory. If an item can be shipped from a vendor within 24 hours, the District does not have to stock the item. If it is an item that we cannot get from a vendor in 24 hours, the District will carry the item in its stocked inventory. The quantity the District carries will vary based upon the usage of the item and the length of time it takes the vendor to resupply the item.

**PROPERTY MANAGEMENT**



*Carpenters Bayou (HCFCD N100-00-00) channel hike and bike trail.*

Asset Management has been using a new tracking software system called Reporting A Problem (RAP). The RAP system was implemented several months ago and improvement was identified immediately as requests were being completed with improved communication compared to the previous system.

An on-going project for the Property Managers is evaluating all concrete-lined channels to identify which channels are in need of desilting. Currently, 170 miles of channels have been documented and 40 sediment removal locations were identified. New programs that started this past quarter are the annual tree planting program, an upgrade of the system repairs program and the selective clearing program. The selective clearing program began in the Greens Bayou area (HCFCD Unit P100-00-00) and will have an estimated cost of \$3 million per year.

Building Management completed several big

projects this past quarter. Staining the concrete floors at the North Service Center (NSC) administration building and pavilion was a major undertaking, and the floors look great. The striping of the NSC parking lot and an upgrade to the security system at the Brookhollow office building were also completed.

The Community Services Section (CSS) coordinated a trash clean-up event along Little White Oak Bayou (HCFCD Unit E101-00-00) sponsored by Keep Houston Beautiful. The Citizen Service Center handled 555 service requests from citizens, and 500 of those requests were finalized. The CSS Agreement Coordinator reported eight new agreements for the quarter which increased the District's active agreements to 356.

Hike and Bike trail projects are a big portion of the Development Coordination and Inspection Sections' (DCIS) current activity due to the economic hardships of many developers. Three percent (3%) of all DCIS projects are trails. Approximately 19% of DCIS projects are road projects. Roadway projects are often accompanied by detention basins and conveyance channels, which serve to mitigate stormwater runoff impacts to a watershed. A total of 211 acres were accepted into the District maintenance program this past year.

## COMPLIANCE



*Crew member safely cutting a downed tree on a buyout lot.*

The District entered into a new safety contract in August with a new vendor. This contract is for safety supplies and related items. The contract is for four years, but typically, the first year is a trial period. The trial

period is to determine if the vendor has performed satisfactorily for both the District and Harris County. If the vendor performs satisfactorily, the option will be extended for the remaining years.

Additional safety training for field personnel began this quarter. The purpose of the extra training was not caused by any increases in incidents, but rather

to better prepare District personnel to remain safe. This past quarter, the District had 30 work-related incidents (nine sought medical attention). Most of the accidents were due to slips, trips and falls.

The monthly employee safety training class incorporated the use of video training at the beginning of this quarter. Employee reaction was positive due to no travel time, and the employees have a visual aid that helps in understanding the topic.

According to the Environmental Protection Agency, the District must develop a Spill Prevention and Control Counter Measure (SPCC) plan. Due to our above-ground fuel storage containers, the District is required to have an approved SPCC plan in place for accidental spillage to prevent water way contamination. There will be a separate plan for each District service center location. These plans are currently in progress.

## MAINTENANCE ENGINEERING



*Buffalo Bayou Pilot Project (HCFCD W100-00-00).*

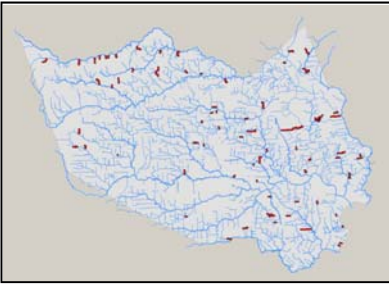
Improvements to the A200-00-00 Second Outlet Channel and Gated Structure on Clear Creek are in progress. Some of the improvements include painting the inside and outside of the control building, stripping and sand blasting all the gates, and concreting the access road to replace the existing gravel road.

The pilot project on Buffalo Bayou is complete (HCFCD Unit W100-00-00). The project consisted of sediment removal and vegetation enhancement. The amount of silt removed was approximately 10,000 cubic yards. An interesting highlight of the project was the unearthing of a granite boat dock, which is now usable for kayak and canoe launching.

The vegetation enhancement portion of the project included removing invasive tree species and planting native species in their place. The District coordinated closely with the Buffalo Bayou Partnership and the construction contractor. The final product has received positive feedback. In particular, park users seem to like the open view of the bayou's water's edge that was blocked prior to the start of the project.

The Cypress Creek spot erosion repair project (HCFCD Unit K100-00-00) moved into the construction phase this quarter. The project limits are from Highway 249 to 4,500 feet downstream and is located adjacent to the Harris County Precinct 4 Kickerillo-Mischer Vintage Park. The project will repair severe erosion that is threatening an existing lake located within the park boundaries. The completed work will also provide a stable base for a hike and bike trail along Cypress Creek and improvements planned in the park by the Harris County Parks Department. The projects low bid was \$485,682.

## GEOGRAPHIC INFORMATION SYSTEMS



*Eighty sites of open channels identified for future repair projects.*

The Geographic Information Systems Department (GIS) was asked a question by Property Management, “How can we identify all District channels that have no rights of way?”

As a result, GIS was able to determine gaps in the right of way of all open channels and identify

adjacent property owners at the same time. GIS also identified the high-volume call areas of the Citizen Service Center, which allowed the District to determine where citizens have requested maintenance repair projects on any of the identified open channels. To date, 80 channels have been identified (See picture to the left.).

Due to the help of GIS, the District will be able to contact all adjacent homeowners in writing to request an easement donation. If necessary, a person-to-person follow up visit will also take place.

## FACILITIES MAINTENANCE



*Tree Spading in HCFCD Basin C500-01-00.*

The District's tree planting program will begin in October of this year with an estimated 10 to 12,000 trees to be planted. Approximately 3,600 of them will be planted at Capital Improvement Project sites.

In January 2010, the District awarded a new tree grow-out contract. This contract will provide the District with 50,000 trees for planting on channels and basins for the next four years. No trees will be purchased from the vendor this year to allow time for the trees to grow. Next year, the District will purchase more than 13,000 trees and shrubs for planting.

In the coming months, tree spade operations will begin. In order to save trees from construction projects, trees are moved to a new site by a spading process (see picture). The District will be moving approximately 75 trees to various sites throughout the county. Many of the trees will be moved from basins in the Greens Bayou watershed (HCFCD Units P518-03-00 and P518-04-00) to other District rights of way throughout the county.

During the summer, college interns from Stephen F. Austin State University helped the District to complete its annual tree inventory. Interns assessed, counted, and recorded data on trees from previous plantings and identified trees on Brays Bayou that are suitable for tree spading. A total of 1,617 trees could potentially be in harm's way during construction projects on Brays. More than 100,000 planted trees were inventoried.

Wildflower seeding began this quarter as well. Approximately 100 acres will be seeded this year with wildflowers. While it is true that 25 acres are reseeding sites, 75 acres are new sites. All of the wildflower seeding is scheduled to be completed by late October.

The third mowing cycle for channels will begin in October and should be completed by early December. Buyout lot mowing will end in late November.

The Department has upgraded its project management software from an internal application to a program developed by an outside vendor with many more features, including the ability to track field work completed by in-house crews. The program is in its early stages of production but so far, efficiencies from inspection to crew production have already been realized.