

HARRIS COUNTY FLOOD CONTROL DISTRICT INFRASTRUCTURE DIVISION UPDATE

October-November-December 2005

News of Note:

- Please congratulate Robert Snoza who was promoted to Property Manager this quarter.

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Introduction

Thank you for your interest in activities of the Infrastructure Division at the Harris County Flood Control District. This newsletter, sent to interested parties each quarter, describes the activities of the Infrastructure Division. Each quarter, one of the division's four departments is examined in depth. This quarter highlights the Fleet Management Department. Please do not hesitate to offer comments or ask questions. You can reach us at 713-316-4815 or by e-mail (rachel.powers@hcfcd.org).

Fleet Management Department

The Fleet Management Department of the Infrastructure Division consists of 12 employees, two mechanic shops, an annual budget of \$2.5 million a distribution center with an inventory of about \$200,000, and 232 on-road and off-road vehicles. Lowell Jacobs, who joined the District in 1998, manages the department.

Distribution Center:

The distribution center provides supplies and equipment for the District's field operations. A manager, two technicians, and a clerk operate the distribution center. The warehouse, which is located at the North Service Center, contains about \$200,000 in inventory. Typical inventory items include health and safety items, such as fire extinguishers, first aid kit supplies, gloves, hard hats, eye protection, raincoats, shovels, and uniforms. Inventory also includes repair parts for vehicles and equipment, such as tires, batteries, windshield wiper blades, light bulbs, and fuses.

In 1998, when Jacobs began working for the District, the distribution center had a much larger inventory than it does now—about \$900,000 compared to today's \$200,000. Jacobs attributes the decrease to two major changes: First, the District has shifted its policy so items once kept in inventory are now managed in an on-call, vendor inventory. For example, when paper towels are requested from the Distribution Center, an order is placed with the vendor to deliver items directly to the user. Second, because the District has outsourced some of its operations, many supplies have become obsolete. For example, the District formerly had a carpentry shop that made repairs to buildings. Now that the District employs contracted carpenters to do similar repairs, there is little need for door hinges, door knobs, caulk, latex paint, and paint rollers previously kept in the warehouse. Obsolete items are usually removed from inventory and auctioned by the Harris County Purchas-

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Fleet Management — continued

ing Agent (www.pur.hctx.net). As Jacobs explained, the move to the new Service Center facility was an excellent impetus for clearing out obsolete inventory items.

The Distribution Center staff is excited about its newest project: an on-line storefront for the items it manages. Working with the District's Information Services Department, the Fleet Management Department will have a Web-based application available on the District's intranet that will allow District staff to easily request items that are currently available from the Distribution Center's inventory.

Vehicle Replacement and Disposition:

The District's fleet consists of 160 on-road vehicles, 61 off-road vehicles, 11 trailers, and dozens of small engine equipment. Of the on-road vehicles, 60 percent are Low Emission Vehicles (LEVs). (The Environmental Protection Agency also has definitions for SLEVs, Super LEVs, and SULEVs, Super Ultra LEVs. The District does not have any SLEVs in its fleet.) The District first began tracking the percentage of its fleet that meets LEV standards in 2002, when 45 percent of on-road vehicles qualified as LEVs. Many of the larger on-road vehicles are being replaced with diesel vehicles. Because the District's supply of diesel fuel is stored on-site in two 4000-gallon tanks, it is available during crises such as those presented during Hurricanes Katrina and Rita. Off-road vehicles include tractors, backhoes, and two airboats. Small engine equipment includes chainsaws, weed trimmers, pole pruners, generators and air compressors.

The Fleet Management Department is responsible for purchasing new or replacement vehicles and equipment as well as the disposal of obsolete vehicles and equipment. Most on-road vehicles are replaced as needed. Typically, vehicles are retained for seven or eight years and up to 150,000 miles. The Fleet Management Department has requested \$520,000 in the 2006-07 budget to purchase new vehicles and equipment to replace older units in the fleet inventory. Notable proposed purchases include crew trucks to

replace aging crew vans, full-size trucks to replace units that currently have more than 120,000 miles or are more than seven years old, an electric forklift for the Distribution Center, replacement tractors, and an electric utility vehicle for use at the North Service Center. The Department also is considering hybrid vehicles with four-wheel drive.

Fleet Maintenance:

At one time, the District had five service centers and each housed a shop for the maintenance of vehicles. Almost all vehicle and equipment repairs were completed in-house. Through attrition and transfers during the past eight years, the staff has been downsized to one shop at each of the two remaining service centers. A staff of five mechanics at each shop performs repairs on small engine equipment; minor vehicle and equipment repair; tire repair, replacement and rotation; and preventative maintenance for off-road and heavy equipment. All repairs for on-road vehicles and any non-preventative maintenance for heavy equipment are outsourced through a contract. Recently, the shops installed additional safety lights on many vehicles in the fleet inventory.



Newly Installed Safety Light

Fleet Management — continued

Budget:

Not surprisingly, the budget for the department remains Jacob's largest challenge. While some expenditures can be anticipated in advance (the department distributes about the same number of rubber safety boots each year), others are more difficult to predict. For example, it is difficult to predict how much money will be needed for repairs, which vary and depend on accidents and other factors. Of the \$1.6 million allocated in Fiscal Year 2006 for repair and maintenance of equipment and purchase of supplies, Jacobs expects to spend or encumber \$1.4 million by the end of the budget year on February 28. The Department has requested a budget of \$1 million for these items in Fiscal Year 2006-07.



North Service Center - Distribution Center

Did you know:



- On-road fleet vehicles have logged enough miles in the past year to get to the moon and back three times. District vehicles traveled approximately 1,570,000 miles this year, which is approximately 130,800 miles each month.
- The District used 45,000 gallons of diesel fuel and 89,000 gallons of gasoline in the past year.
- Sixty percent of on-road vehicles are rated as Low Emissions Vehicles by the Environmental Protection Agency.
- The District used 467 cans of wasp spray.
- The District used 198 pairs of rubber boots and hip waders.
- The District used 687 pairs of safety glasses.
- The District used 1,088 cans of insect repellent.
- The District used 2,144 packages of Gatorade (enough to make 5,360 gallons).

Facilities Maintenance

The Facilities Maintenance Department is responsible for vegetation management and debris removal operations on approximately 16,000 acres of District right-of-way. The Department accomplishes these tasks through the use of contract and in-house labor located at the District's two satellite service centers. Vegetation management includes activities such as turf and wildflower establishment, mowing, herbicide application, and tree planting.

Herbicide Program:

The herbicide crews continued to target undesirable vegetation, such as Johnson Grass, this quarter. Some chemicals are applied using a backpack while others are applied as a broadcast treatment. One of the areas treated for this quarter was Greens Bayou (HCFCD Unit P100-00-00) from the upper end to Interstate 45.

Turf Establishment

Program: The fourth quarter contract Turf Establishment Program completed 71 sites representing 468 acres. Sites included five Capital Improvement Projects (CIP), six federal projects, 40 maintenance projects, and 20 Maintenance Construction Group projects.

Forestry Program: The Department planted 10,619 trees as of December, 2005. It



Hydroseeding with fertilizer upstream on the east side of HCFCD Unit E200-01-00

plans to plant more than 20,000 by the end of March. Planting locations include:

- 1,494 trees were planted on HCFCD Unit C547-01-00
- Seven trees were spaded from the Arbor Oaks neighborhood and transplanted to the North Service Center
- 6,565 trees and shrubs were planted on HCFCD Unit T501-01-00 and T101-00-00 extension
- 915 trees and shrubs were planted on HCFCD Unit E500-10-00
- 849 trees and shrubs were planted on HCFCD Unit B500-04-00
- 596 trees were planted on HCFCD Unit E500-04-00
- 200 trees were planted on Brays Bayou (HCFCD Unit D100-00-00) between Calhoun Street and Scott Street

Selective Clearing Program:

Recently completed selective clearing projects include:

- HCFCD Unit E122-00-00 (a tributary of White Oak Bayou) 1000 feet downstream from Fallbrook Street to the second railroad crossing
- Gum Gully (HCFCD Unit R102-00-00) from North Diamondhead to Diamondhead Blvd.

Currently, selective clearing is occurring on a tributary of Greens Bayou (HCFCD Unit P133-00-00).

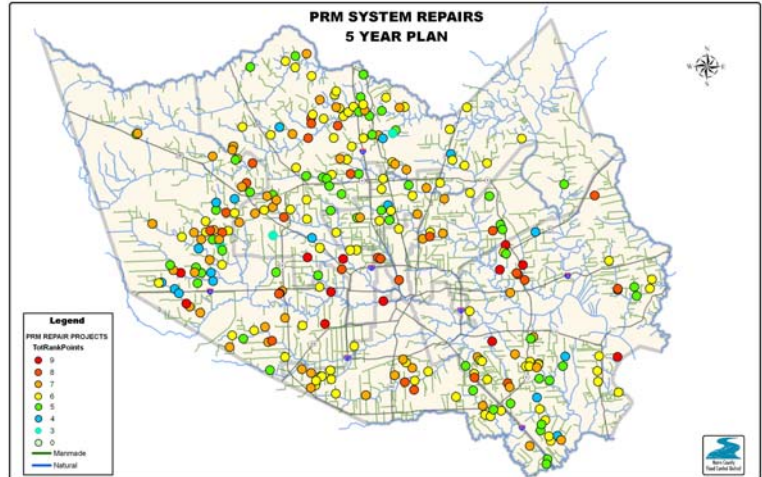


Volunteer Tree Planting on HCFCD Unit B500-04-00

Maintenance Engineering

The Maintenance Engineering (ME) Department prepares construction bid packages and manages engineering contracts for maintenance related (non-CIP) repairs. ME consists of three sections: Project Design, Construction Coordination, and Geographic Information Systems (GIS).

Projects prepared for bidding include improving the cathodic protection system at Sesquicentennial Park and an erosion repair project in the Greens Bayou Watershed. **Construction Coordination** recently completed the removal of unwanted encroachments on Mason Creek (HCFCD Unit T101-00-00) and restoration of the backslope drainage system. **Project Design** continues to develop numerous in-house design projects and oversee design projects assigned to engineering consultants. **GIS** is currently involved in the Tree Inventory Mobile Application Project (TIMAP) with the Vegetation Management group. GIS is also working with Property Management to develop a dataset for identifying system repairs.



Property Management 5-Year System Repair Plan
(Red is the highest priority)

DEPARTMENT STATISTICS:

Outfield:

- Data points collected - 79,700
- Basin data collection - 100% complete
- Watershed data collection - 65% complete

Citizen Service Center:

- Service requests received this quarter - 568
- Service requests completed this quarter - 544

Building Management:

- Burglar alarm system for the North Service Center (NSC) Administration Building - installed and working.
- The furniture selection and installation for the NSC Administration Building -100% complete.

Buyout Mowing Program:

- Total properties being mowed - 1,576
- New lots added this quarter - 88

Multi-Use Agreements:

- Total active agreements - 304
- Total pending agreements - 29

Property Management Department

The Property Management Department is responsible for the management of all District real property and associated buildings. The Department has three sections that manage the District's property: Facilities Management Section (FMS), Development Coordination and Inspection Section (DCIS), and the Community Services Section (CSS).

FMS established a 5-Year System Repair Plan last quarter that is 90 percent complete. The development of the 5-Year Selective Clearing Plan is still underway. The first report on the COMET computer software was received, and FMS continues to evaluate the results. Finally, the encroachment removal procedure is 90 percent complete. **DCIS** has a total of 408 active sites. Of those sites, 68 are in deficiency, five are in one year warranty, and 335 are currently being monitored. **CSS** executed two new trail agreements this quarter located on HCFCD Units T101-00-00 (Mason Creek) and G103-24-00 (Rogers Gully).