



**“Green Hillsborough” is not just a slogan, it’s a way of doing business for Hillsborough County. For years, Hillsborough County government has been making strides to protect the local environment and reduce its energy needs. Many departments have undertaken efforts to help make this a reality, such as the Public Works Department’s current program to replace all traffic light bulbs with LED lights, and Fleet Management’s purchase of 13 hybrid vehicles to date.**

**This document chronicles the County’s green efforts, and will be updated periodically when new programs come online.**

**Updated as 4/23/08**

### **Cooperative Extension**

- From 1999-2006, coordinated and co-taught classes for homeowners on building green and remodeling green. Topics included energy and water efficiency, and focused on “off-the-shelf” technology that is inexpensive.
- Participates in the Florida Yards and Neighborhoods (FYN) Program that educates homeowners and other community members about the benefits of Florida-friendly landscaping.
  - Includes workshops, the Florida-Friendly Yard designation program, Water-Wise Awards competition, and presentations to community associations.
- Provides free “Water-Wise” workshops, rain barrel and “Compost Happens” classes to the public and includes distribution of free compost bins, low-cost environmentally-friendly irrigation kits, and free rain barrels to attendees. Programs are sponsored by County and City of Tampa water departments and County Solid Waste Management Department.
- Provides educational publications and resources on green topics to the public.

### **Economic Development**

- Oversees the Agriculture Stewardship Program Agreement between Hillsborough County and agricultural landowners, which provides an incentive to landowners in the form of an annual grant, in exchange for an agreement from the landowner to not convert agricultural land to non-agricultural use for a period of 10 years.
  - The grant is equal to 75% of the ad valorem tax value on the agricultural land and agriculture production-related structures.
  - Approximately 9,000 acres and 220 properties are currently participating in the project.

- Implemented a program, in cooperation with the Solid Waste Management Department and Cooperative Extension Service, to provide agriculture pesticide collections for farmers to dispose of cancelled, suspended and unusable agricultural pesticides. Funding is through the Environmental Protection Commission's Pollution Recovery Fund.
- Organized one of the first sessions in the area on green commercial development for commercial real estate developers and investors in 2007 for the Florida Gulf Coast Association of Realtors, which included speakers from the County's Planning & Growth Management Department and County Planning Commission.
- Facilitated planning discussions with US EnviroFuels, the Institute of Food and Agricultural Sciences (IFAS) Research and Education Center, and the Cooperative Extension Service to discuss the proposed ethanol plant in Hillsborough County and the possibility of growing crops locally for use in the plant.
  - Potential growers in the County have been solicited and the group has applied for a Florida Department of Environmental Protection Renewable Energy Technologies Grant to research the possibility of growing crops for ethanol in the County.

### **Environmental Protection Commission of Hillsborough County (EPC)**

- Manages the federal "Pollution Prevention (P2)" program locally, which provides free audits to local businesses to identify ways to reduce or eliminate pollutants.
- Manages the "Green Yards" program, started in 2004, that assists automotive recycling yards in the County with becoming more environmentally-friendly through implementing best management practices and pollution prevention strategies, and helps them become certified by staff as a "Green Yard."
  - Currently 33 yards are participating in the program, and eleven have been certified as Green Yards. Certified yards display "Green Yard" flags and are listed on the EPC's website. Website: [www.epchc.org](http://www.epchc.org)
- Implements the "Green Star" program, started in 2005, which encourages automotive repair facilities to undertake similar best management practices and pollution strategies, and helps them become certified as a "Green Star" facility.
- Coordinated with the Hillsborough County School Board to receive a \$200,000 grant received from the U.S. Environmental Protection Agency in 2004 to retrofit the diesel exhaust systems on 258 local school buses, reducing children's exposure to harmful pollution.
- Manages the Pollution Recovery Fund grants program, which provides funding of environmental projects that help clean up polluted areas and pays for a portion of the Artificial Reef program. This program, which is funded from penalties paid by EPC rule violators, is offering more than \$500,000 in 2008.
- Formed the Clean Air Partnership (CAP) with the Pinellas County Department of Environmental Management to reduce the number of work-related, single-occupancy vehicle trips and encourage the use of clean fuels. The program seeks to link employers to local commuter organizations, such as Bay Area Commuter Services, and companies that assist with clean-fuel vehicle conversions. Also

- recognizes employers that participate in these programs through public relations efforts. Website: [www.cleanairpartnership.com](http://www.cleanairpartnership.com)
- Promotes use of hybrid vehicles and encourages large fleet owners to purchase hybrid vehicles through recognition and promotion programs since 2005.
  - Held first environmental summit in 2006, which brought together environmental groups, consultants, political leaders and the public to discuss environmental concerns.
  - Enforces laws that cover a variety of environmental issues, such as vapor control at all gas stations, open burning and car wash standards.
  - Educates residents on air quality issues, through a “Smart Driver” partnership with the Florida Department of Transportation that educates drivers on the problems of high ozone and how good driving and vehicle maintenance behaviors can reduce ozone. Also holds annual “Clean Air Month” events and programs every May to increase public’s awareness of issue.
  - Monitors water quality in Tampa Bay and publishes progress and areas of concern for public and governmental organizations to review.
  - Participates in Tampa Bay Estuary Program’s Nitrogen Management Consortium to develop innovative approaches for reducing nutrient input into the Bay, and provided a one-time contribution of funds to the effort.
  - Developed a Seagrass Management Plan that was approved in 2007 that defines a course of action for seagrass restoration and management in Tampa Bay.
  - Works with local governments and groups through an interlocal agreement to create Basin Management Action Plans and the implementation of Total Maximum Daily Load goals that will focus resources on improving water quality in identified impaired water bodies. Website: <http://maps.wateratlas.usf.edu/bmap>
  - Monitors accidental release of hazardous chemicals in the air, and ensures that commercial facilities undertake reasonable measures and improvements to prevent future accidents.
  - Exploring opportunities, as directed by County Commission, to receive a grant from the Environmental Justice Program to establish community-based partnerships to reduce toxic risks in local communities.
  - Monitors and posts air quality index and water quality testing results on its website for public to review. Website: [www.epchc.org](http://www.epchc.org)
  - Protects groundwater and surface water quality through monitoring and inspecting underground and aboveground storage tank systems, wastewater facilities, solid waste management facilities and businesses that create hazardous waste. Also oversees closing and clean-up of storage tanks and petroleum-contaminated sites.
  - Implements and enforces wetland protection and mitigation rules, which includes reviewing rezoning requests to decide if they will impact wetlands, requiring mitigation of wetlands destroyed and repair of affected wetlands.
  - Regulates and enforces laws relating to the trimming and alteration of mangroves, to ensure their protection in local water bodies.
  - Creating an action plan to implement the state’s new Urban Turf Fertilizer Rule that was adopted in December 2007 and educate consumers on sound fertilizer application practices. Tampa Bay Estuary Program also involved in effort.

- Administers the Artificial Reef Program since 1986, which seeks to increase habitat diversity and sport fishing opportunities in Tampa Bay by providing hard-bottom substrates and communities.
  - Program is funded by the EPC's Pollution Recovery Trust Fund, the Florida Fish and Wildlife Conservation Commission's sale of saltwater fishing licenses, the Federal Aid in Sport Fish Restoration Program and donations from local marine construction contractors.

### **Facilities Management**

- Hired an Energy Conservation Manager in 2000, who has instituted programs that save the County more than \$1.6 million dollars from energy cost avoidance and eliminate more than 13,000 tons of carbon dioxide emissions annually.
  - Examples include Central Cooling Plant for Edgecomb Courthouse and five other County buildings downtown, which saves \$1.1 million and prevents the release of more than 10,000 tons of carbon dioxide annually.
  - Also has overseen installation of more efficient lighting, HVAC systems and automatic shut-off sensors on lights in County buildings.
- Established County Energy Management Teams under each Assistant County Administrator in January 2008 that will identify and reduce energy waste. All County departments will be required to participate and follow energy programs that are introduced by these teams.
- Manages surplus program for equipment, supplies and furniture. Items are available for re-use by County departments, are donated to charities or are auctioned off to recycling companies.
- Uses recyclable paper products and environmentally-safe cleaning products and pest control products in the County's facility custodial program.
- Coordinates a commercial paper product recycling program in downtown County offices, the Roger P. Stewart complex, and a paper and plastic recycling program at 32 County satellite offices. This program recycled more than 330 tons of material in 2007.

### **Fleet Management**

- Purchased its first hybrid car in 2002 and currently has 13 hybrid vehicles in the fleet.
- As of 2008, purchased 15 vehicles that can run on Ethanol-85, and 695 vehicles that could run on bio-diesel.

### **Human Resources**

- Offers several incentives to employees to carpool or use public transportation.
  - All County employees are eligible to receive 75% discount on monthly bus passes.
  - Employees can receive a \$50 per person, per month Commuter Bucks subsidy from the County when they vanpool through Bay Area Commuter Services (BACS). This subsidy helps pay for the costs that riders split in vanpools to cover expenses.

- Employees that carpool to work with three or more people receive free parking in County-owned garages.
- Adopted a flexible work schedule policy in July 2007 that allows certain employees to request flexible hours. The program seeks to do its part in decreasing traffic congestion on County roads.

### **Information & Technology Services**

- Participates in Hewlett-Packard (HP)'s Green initiative by purchasing computer hardware that is Energy-Star 3.0 and 4.0 compliant.
- Replaces outdated computers with new HP computers that have received top honors for their energy efficiency. All County computer equipment includes a stand-by mode that shuts off when not in use.
- Implemented a program whereby computer hardware that is replaced is sent to the County's surplus and recycling program, and then donated to non-profit organizations or sold at auction to recycling companies.

### **Parks, Recreation and Conservation**

- Converted the majority of lighting at the County's 250 recreational sports fields from conventional bulbs to metal halide lighting, which provides concentrated lighting, creates less light pollution and is more energy efficient.
- Maintains environmental demonstration/learning centers at three parks—Lettuce Lake Park, Alderman's Ford Park, and Upper Tampa Bay Park. Some of the programs include partnerships with Hillsborough Community College and the Audubon Society. Environmental information also is available at numerous kiosks in other parks and trailheads.
- Applies green landscaping, irrigation standards, integrated pest management and other environmentally-friendly practices on Parks Department lands.
- Undertakes an invasive species removal program throughout publicly-owned lands in the County.

### **Planning & Growth Management**

- Approved a "green roof" incentive in the Land Development Code for builders in November 2007 that would allow builders to count the space on the roof as part of the green space that is a requirement in all developments. Additional amendments to further define the incentive will be considered by County Commission in October 2008.
- Secured a grant through the Southwest Florida Water Management District to host a one-day green roof symposium in Hillsborough County in early summer 2008 with the "Green Roofs for Healthy Cities" group from Canada.
- Approved another green building policy in the Land Development Code that reduces the number of parking spaces required for certain commercial developments in the unincorporated County, which will ultimately increase the amount of green space.
- Approved a site plan review incentive in the Land Development Code that will require the department to expedite green development site plans. The County also

expedites the building permitting portion for residential projects that are considered green.

- Seeking approval by the County Commission in June 2008 for a formal definition of “green development” in the Land Development Code, which will assist in the expediting of green development site plans.
- Increased services to green builders in 2008 by having an engineering technician on staff certified as a “green inspector” by the Florida Green Building Coalition, who can evaluate homes to see if they qualify for a Florida Green Home Designation.
- Manages a Brownfields Redevelopment Program, started in 1999, that provides assistance and incentives to public and private property owners and businesses to facilitate the environmental cleanup and reuse of contaminated urban property. This program is part of the County’s redevelopment and growth management strategy and has cleaned up or redeveloped 75 acres to date.
- Requires mitigation for consumption of natural habitat or resources in developments. A tree preservation and land-clearing ordinance also has been enacted for construction projects.

### **Public Works Department**

- Retrofitting more than 15,000 County-owned traffic and pedestrian signals with LED lights instead of incandescent lights, and replacing the fluorescent lights on 890 overhead street signs with electronic lamps, greatly reducing the department’s energy costs and output.
  - Project is estimated to save 4,775,254 kilowatt hours in energy and \$672,334 in funds annually.
- Upgrading County’s intelligent traffic control system, which will allow for signal timing to be remotely changed in response to traffic back-ups, reducing vehicle idling time, air pollution and gas consumption.
- Utilizes reclaimed water whenever practical for street sweeping, cleaning out stormwater pipes and watering vegetation.
- Utilizes recycled, crushed concrete for stabilization of road slopes and stormwater installations to allow for better drainage. Also recycles asphalt milled off of roads for use in asphalt mix on future road repair and resurfacing projects. Additionally recycles other materials such as concrete, metal, tires, and brush and tree debris trimmed from rights-of-way.
- Uses slip lining and point repair procedures on stormwater system repairs in environmentally-sensitive areas to reduce minimal impact.
- Uses environmentally-friendly products to clean mold, mildew and stains off of road signs.
- Undertakes a program to safely remove and dispose of or recycle approximately 1,500 pounds of hazardous materials annually of traffic equipment-related materials, such as street lights, industrial batteries, and copper wire and cabling, in accordance with industry and environmental requirements.
- Implements advanced stormwater control requirements on County construction project sites.

- Conceived the idea of the Watershed Atlas project and developed it in partnership with the Southwest Florida Water Management District and the University of South Florida Center for Community Design and Research. The Atlas is a website that provides information on all lakes, ponds, streams and watersheds in Hillsborough County, including aerial images and photos, water quality data, hydrologic data and history that can be analyzed, downloaded and updated by users. Website: [www.hillsborough.wateratlas.org](http://www.hillsborough.wateratlas.org)
  - The Watershed Atlas concept has since been adopted by numerous other counties in Florida, and a statewide, seamless Atlas is planned.
- Participates in the Pond Watch, Lake Management Program and Stream Waterwatch programs, which teaches volunteers to collect water quality samples for local ponds, lakes and streams, and submit them to the Watershed Atlas for monitoring and research purposes. These programs are undertaken in cooperation with several partners such as the Southwest Florida Water Management District, Hillsborough Community College, University of Florida and University of South Florida.
- Conducts several stormwater and environmental education programs, including:
  - “Officer Snook” program for elementary school children and the “Stormwater Ecologist” program for middle/high school children, that teaches about stormwater pollution, recycling and reducing waste.
  - Adopt-A-Pond program that helps neighborhood volunteers clean up and restore the natural habitat in their stormwater ponds. Also provides pond walks and evaluations on neighborhood ponds to teach about natural ecology and suggest improvements.
  - Storm Drain Marking program that provides interested neighborhoods with colorful marker signs to glue on their storm drains and educational door hangers reminding residents to not pour illegal materials down drains.

### Real Estate

- Directed to consider sustainability and energy conservation factors when planning to build new County facilities and to make these items factors in awarding building and design contracts as a result of County Commission vote in March 2008.
- Acquired more than 43,600 acres of land through the County’s Environmental Lands Acquisition and Protection Program (ELAPP) since its inception in 1987 at a total price of \$186.3 million. The County received \$76 million of that in joint funding. This program preserves natural habitat, water quality, and reduces the flood risk in flood-prone areas.
- Began construction in November 2008 on first County-owned LEED-certified building, the Tampa Bay History Center.

### Solid Waste Management Department

- Expanding the County Resource Recovery Facility’s capacity from 1,200 tons to 1,800 tons per day by May 2009, which will divert approximately 200,000 tons of processable solid waste annually from the County’s Southeast County Landfill.

This expansion will also increase the facility's electricity production to 45 megawatts per day, enough to provide electricity to 35,000 homes.

- Connecting the Resource Recovery Facility to the nearby Falkenburg Advanced Wastewater Treatment Plant to provide electricity for running the plant by June 2008, at an annual savings of \$380,000 per year to Water Resource Services. The agreement means the plant will not have to buy electricity from TECO, saving this valuable resource.
- Provides a curbside recycling program to all 220,000 residential customers, which diverts approximately 29,000 tons of recyclable materials from the waste stream annually and saves valuable landfill space.
- Converts more than 200,000 tons of vegetative waste into mulch and other beneficial products annually, and provides mulch to residents at yard waste facilities.
- Removes approximately 400 tons per year of potentially harmful material from the waste stream through the County's Household Chemical Waste Collection; the program is free to residents that receive household garbage collection.
- Hosted a free Green Certification Workshop in 2007 that was attended by over 60 professionals in the public and private sectors.
  - The program educated and encouraged the commercial sector on various topics including how to create a "green" and profitable work environment; green building design; environmentally sound management of construction and demolition debris; and the purchase and use of products with recycled content.
  - Attendees also received free manuals and samples funded through a grant that the department received for the program.
- Sells many materials that are diverted from the waste stream and can be recycled to various industries, such as metal, shredded tires for ground cover, re-mixed high-quality paint and mulch.
- Funds anti-litter and anti-dumping education campaigns, inspections and clean-ups continuously throughout the County.
- Provides annual grant to Keep Hillsborough County Beautiful to assist this non-profit organization in its clean-up and education programs.

### Water Resource Services

- Supplies an average of 20.2 million gallons of reclaimed water per day to more than 15,000 residential and commercial customers. Another 10,000 locations are in the queue for connection to the distribution system. The program started for residential use in 1994.
- Established pro-active and thorough water conservation education and enforcement program.
- In conjunction with the Office of Neighborhood Relations' mini-grant program, provides 20 annual grants of up to \$2,500 each to encourage the conversion of traditional irrigation systems on homeowner association common areas to micro-irrigation.
- Coordinated toilet rebate program from 1994 through 2008 that helped residents replace approximately 78,000 older model toilets with ultra-low flow toilets.



- Provides joint funding for Southwest Florida Water Management District's Water Conservation in Hotels And Motels Program (CHAMP) to purchase promotional materials that are placed in the participating lodge rooms. These materials encourage voluntary choice of room occupants to not have their linens washed on a daily basis, saving water and energy.
- Provides no-cost irrigation system evaluations to property owners. Individualized reports are provided back to the property owners with recommendations on how to correct problems that are discovered, which frequently result in water use efficiencies.
- Contracting a scientific evaluation of Weather-Based, or ET-Based, irrigation controllers with the Institute of Food and Agricultural Sciences at the University of Florida to evaluate if this technology is valid for our climate and geology.