

Volusia County Government's Green Initiatives

Volusia County Government and its employees have found that it's easy being green. The County is a state leader in environmental protection, land acquisition and conservation, smart growth and recycling efforts.

From its nationally recognized Volusia Forever program for land conservation to its Habitat Conservation Plan protecting our marine life on the coast, Volusia County Government is striving to make a difference in our environment now and for future generations.

The following is a list of some of the green initiatives the County has launched in recent years:

Environmental Management

This division has a Re-Green program through which the County funds the planting of Florida native trees in areas that are accessible to the public. The re-green program also includes coastal dune planting and estuarine planting projects.

Volusia County has a Water Wise Landscape ordinance that provides additional protection to Florida's water resources through water conservation and the preservation and protection of Florida's natural resources. The ordinance limits the amount of irrigation that can be installed, dividing systems into high/medium/low and no irrigation zones. The ordinance promotes the use of Florida native plants in landscaping and encourages the reduction of fertilizer and pesticide use. Using plants that are adapted to local conditions (Florida native) reduces the costs of the landscaping (from plant loss) and the maintenance needs of the landscape (including the energy usage). Native plants also benefit the native wildlife by providing food and/or shelter.

Facilities Division

This division, which provides comprehensive management of more than 75 County buildings, is taking a proactive approach to saving energy. Their programs include:

- Facilities have been retrofitted with T8 fluorescent light bulbs. These bulbs reduce energy consumption by 25 percent (estimated to save more than \$8,700 annually after two years). They also run cooler than the T12 bulbs they often replace, reducing cooling costs.
- Building control automation has been installed in the Historic Courthouse, the Thomas C. Kelly Administration Center, Volusia County Courthouse, Information Technology facility, and the Volusia County Branch Jail and Corrections facility. Additional automation has been installed in the courtrooms at the Volusia County Courthouse Annexes in Daytona Beach and New Smyrna Beach.
- Florida Power and Light, in partnership with Volusia County's performance contract, installed energy-efficient lighting and water-saving I-com flush valves throughout the corrections facilities. This project, now in its third year, cost \$3.2 million with payback in seven years.

- Facilities employees have completed the re-commissioning of the 400,000-gallon chill-water tank to provide off-peak chill water at the Volusia County Branch Jail. This project was funded by Florida Power and Light.
- The division plans to replace 32 air-handling units for the Volusia County Branch Jail, shedding 190 tons of heating, ventilating and air conditioning. This will reduce fuel emissions and is calculated to save \$50,000-\$75,000 in energy costs.
- Through an internal swap program, employees can advertise equipment that is no longer needed in one area. Equipment that is no longer needed is auctioned off.

Fleet Management

This division is actively engaged in planning and creating a greener fleet. The green fleet initiative includes:

- **Hybrid-electric vehicles:** These vehicles achieve 40 - 50 percent better fuel economy than their conventional counterparts and are more environmentally friendly. They are Super Ultra-Low Emission Vehicle (SULEV) certified and use regenerative braking to charge the battery pack.
- **Ultra-low sulphur diesel fuel:** This new diesel fuel reduces emissions by 95 percent as compared to high-sulphur diesel. This new fuel was mandated in 2008 by the Environmental Protection Agency and Department of Energy. Volusia County began the conversion six months before the deadline.
- **Higher-mileage vehicles:** By purchasing Impala sedans instead of Crown Victoria sedans for sheriff's deputy cruiser, we have improved gas mileage by 3 mpg.
- **Hybrid-electric diesel trucks:** These trucks are in the pilot program test phase with Florida Power and Light. Hybrid-electric diesels get 40 percent better fuel economy and are Ultra-Low Emission Vehicle (ULEV) emission certified. An added bonus is that the truck can become a 15kw generator at the job site.
- **Ethanol E-85 flex-fuel vehicle:** Volusia County has 60 ethanol flex-fuel-capable vehicles in the fleet. They regularly use unleaded gasoline because ethanol in this region is not yet prolific. Once ethanol plants are built in Tampa and Jacksonville, a state infrastructure and distribution system will make this fuel readily available. Then, Volusia County will be able to acquire an ethanol fueling station. Ethanol vehicles burn cleaner than gasoline and are ULEV emission certified. Ethanol is a domestically produced renewable energy made from corn, wheat or sugar cane.
- **Programmable thermostats:** New thermostats were installed in Fleet Management offices and maintenance shops last year, saving \$15,000 in electric and natural gas bills.
- **Natural gas-powered vehicles:** Volusia County plans to purchase natural-gas-powered vehicles. These vehicles are SULEV emission certified. Because a natural gas fueling station would have to be built, Fleet Management is collaborating with other local governmental agencies regarding future joint venture fuel sites.

Library Services

The Volusia County Public Library System, with 16 branches and a huge inventory of books and periodicals, is a natural place to promote environmental awareness and recycling.

The County is applying for Leadership in Energy and Environmental Design (LEED) certification for the Deltona Regional Library expansion from the U.S. Green Building Council Leadership in Energy and Environmental Design. This nationally recognized program verifies that a building is environmentally responsible, profitable and a healthy place to work.

Other green initiatives at the library system include:

- All libraries have been refitted with electronic ballast and T-8 lamps to conserve energy.
- Leftover paint from large projects is used to paint restroom and office areas.
- Old greeting cards are used for bookmarks.
- Old furniture and shelving are reused within the library system.
- Lights are turned off when rooms are not in use.
- Book boxes are provided to patrons and staff.
- The Friends of the Library groups sell used books to the public.
- The Friends group at the Ormond Beach Regional Library has a large recycling bin in the parking lot for newspapers and magazines.
- All library branches accept used books, magazines, movies and craft materials from the public for in-house use
- Barcodes from periodicals and other discarded materials are reused.
- The New Smyrna Beach Regional Library partners with local printing companies to provide a paper port, where extra pieces of colored and white paper is available.
- Branches ask patrons to bring in recyclable items for summer arts and crafts programs.
- SAM cover sheets and old photocopies get a new life as children's coloring sheets and note pads.

Mosquito Control

This division stocks semi-permanent and permanent water areas with native minnows to control mosquito production. These fish prey on immature mosquitoes so there is less need to use insecticides. Similar to mosquito control with minnows, Grass Carp are put in storm water ponds to feed on weeds, which reduce the need for herbicides.

Solid Waste and Recycling

This division administers a curbside recycling program for unincorporated residents, allowing homeowners to recycle, mixed paper, cardboard, aluminum and steel cans, plastic containers and bottles. The County's recycling program has consistently exceeded the state's mandate of recycling at least 30 percent of municipal solid waste.

The 3,400-acre Tomoka Landfill has provided an environmentally safe location to deposit and bury the county's municipal solid waste since 1972. The landfill offers a number of innovative programs to promote reuse and recycling, including:

- Collection and recycling of waste tires, scrap metal and lead-acid batteries
- Collection and recycling of residential electronics
- A paint exchange and household chemical swap shop
- Used motor oil and home fuel oil collection programs
- Grinding yard waste into mulch, which residents can take without charge
- Extraction of methane gas from the garbage cells, generating enough electricity to power 3,800 homes
- Collection of household hazardous waste for safe and proper disposal

Volusia County offices recycle paper, cardboard, plastics, aluminum and steel cans. Individual recycling bins are provided to each employee to further encourage recycling. Volusia County recycles nickel cadmium and lithium hydroxide batteries. Post-consumer recycled paper is used in some divisions.

Traffic Engineering

This division is in the process of upgrading the county's traffic signals to light emitting diode (LED) and anticipates completing the county conversion of approximately 200 signalized intersections this summer.

Volusia County/University of Florida Extension

From energy conservation to making your garden grow, Volusia County's Extension service offers a wealth of "green" information for families and farmers. Agents instruct gardening classes and provide assistance with community issues such as water conservation, environmental protection and economic stability for agricultural enterprises – all essential to helping maintain a healthy environment. The service reaches more than two million people each year through presentations, phone calls, lab diagnoses, pamphlets and classes.

Setting a good example, the Agricultural Center has planted low-maintenance landscape and native gardens and installed low-flow toilets.

Volusia Council of Governments

In addition to all of Volusia County Government's efforts the, Volusia Council of Governments is exploring a smart growth/sustainable communities' initiative to guide countywide growth towards a greener infrastructure, while encouraging a strong local economy. More information on this initiative can be found at <http://volusia.org/smartgrowth/>