



# *Education to Promote Environmental Stewardship*

## **PARTNERSHIPS**

Through innovative partnerships with both public and private agencies, Pinellas County has developed an extensive environmental education program to inform residents about the importance of environmental stewardship. The following paragraphs cover the partnerships in which Pinellas County participates.

### ***School Board Partnerships***

Pinellas County partners with the School District on a number of initiatives that promote environmental stewardship to local students. Through Enterprise Village, Pinellas County is able to teach students about the importance of water conservation and social responsibility for resources (see below for more details). Pinellas County also offers presentations through the Speaker's Bureau, where County employees may attend classes to lecture students about environmental issues that can affect them.

### ***Partnerships with Area Colleges***

In 2007, Pinellas County began the development of a Water Atlas, in conjunction with the University of South Florida, to provide one place for information for both citizens and scientists. The Water Atlas receives information and data from a number of sources, including SWFWMD, DEP and USGS. Formerly, the fragmented data sources made it difficult to track down all of the needed information. With the creation of the Water Atlas, water quality data is now compiled into one location for all interested parties to view as they need it.

### ***Partnerships with Non-Profits***

Pinellas County has developed partnerships with a number of non-profit agencies in promoting environmental stewardship. Among these non-profits are the Friends of the Brooker Creek Preserve. This group provides support to the Preserve through volunteer programs, fundraising and education. They are very active in their pursuit to ensure that the Preserve remains for future generations of Pinellas County residents.

## **OTHER ENVIRONMENTAL PROGRAMS**

Many Pinellas County departments develop brochures and videos that are available to the public through County offices, special events, civic meetings, and on Pinellas County's television station, PCC-TV. The Department of Environmental Management and Pinellas County Utilities are among those departments producing the greatest number of materials related to environmental protection for the public.

The Storm Drain Marking Program was initiated by the Department of Environmental Management to educate citizens about what does and does not belong in storm drains. In Pinellas County, storm drains along the sides of streets often drain directly to bodies of water. These drains were designed to channel stormwater from the roads directly to a receiving body of water. In an urban area such as Pinellas County, water flowing into the storm drains often takes a number of pollutants with it. Many citizens do not realize that storm drains do not flow to the sanitary sewer system, as many do in other parts of the country, and are not aware that the litter they leave on the streets and the fertilizers they apply to their lawns, can make their way into the storm drains and impact the quality of nearby surface waters, as well as impede flows and exacerbate flooding.

The Storm Drain Marking Program allows citizens to place placards on the storm drains within their communities that explain they flow directly to a body of water. This campaign is designed to educate people that their actions can have a direct impact on the quality of surface water in their communities. Pinellas County has developed a number of different placards to state that a drain may flow to a bay, lake or creek (some markers are also in the Spanish language).

The County will also be researching the development of a 'green' map for visitors, identifying conservation-minded and energy efficient operations and programs, such as clean marinas, hotels participating in programs to reduce waste and conserve energy, and travel destinations with natural or cultural interests.

Pinellas County Utilities (PCU) has developed a multi-tiered approach to providing environmental education to the citizens of Pinellas County. Employees are available through the Speaker's Bureau to attend various functions at schools, civic clubs, homeowners associations, seniors' groups and private clubs to present lectures on where water comes from, conservation programs and activities, reclaimed water, recycling, and various other environmentally-related topics.



***Pinellas County Utilities encourages the sorting and recycling of trash.***

The Enterprise Village Water Resources Education Program is a school-based educational program offering a combination of six weeks of classroom instruction with a one-day field trip that enables fifth grade students to experience the challenges of real-life business operations. PCU, in cooperation with Pinellas-Anclote River Basin Board of the SWFWMD and the Pinellas County Schools, is sponsoring a water resources center in Enterprise Village that teaches the value of water conservation implementation methods and social responsibility for resources.

PCU is actively involved in continuing teacher education programs offered through Pinellas County Schools, Pinellas County Technical Schools, and other local higher educational providers, and the SWFWMD. Keeping educators informed about environmental issues and our shared natural resources is an important role of PCU conservation initiatives. The goal of this initiative is to form a ripple effect of conservation education and environmental awareness, which will be felt throughout the community.

Additionally, PCU participates at numerous community events, fairs and expositions in and around the County, local shopping malls, Earth Day and "Drinking Water Week" celebrations,

environmental festivals, and career days at local schools. Newspaper inserts, newsletters, booklets and flyers are used to promote water conservation awareness. Also, various bill stuffers, sent to all PCU customers, stressing the need for conservation, are periodically distributed.

In addition to the above programs, Pinellas County hosts children's summer camps each summer. Currently, camps are held at Weedon Island Preserve, Brooker Creek Preserve, Heritage Village, and at a number of Pinellas County parks. These camps are designed to foster environmental awareness in students.

## ECO-TOURISM

Pinellas County is also able to promote itself as a tourist destination with strong connections to the environment, thereby educating both residents and tourists through such connections. It is becoming increasingly clear that many tourists are looking for something more from Florida than the commercialized, theme park-oriented tourist industry has to offer. Pinellas County has long been accustomed to capitalizing on its beaches, and other forms of eco (nature)-tourism are becoming more popular and marketable to tourists. Avi-tourism (bird watching) is recognized as an increasingly popular venture and, coupled with Pinellas County's diverse and sizeable bird population, has the potential to provide eco-tourism opportunities within the County. The establishment of the Great Florida Birding Trail, with locations in Pinellas County, has also helped draw avid bird watchers to the area.



***Pinellas County offers a number of nature-based recreational activities, including kayaking***

While the area is already a major attractor of motorized watercrafts and beach goers, Pinellas County has begun to develop a series of canoe and kayak trails in the waterways within and surrounding the County. With the increasing popularity of this pastime, it may be possible for the County to use this blueways system to attract tourists who desire to view Pinellas County from angles not possible when standing on the land.

Further study will be needed, as well as intergovernmental coordination, to assess additional eco-tourism opportunities and to develop long-term strategies to promote the County as a destination for environmentally-based activities.

## COUNTY EDUCATIONAL FACILITIES

### ***Brooker Creek Preserve***

The Brooker Creek Preserve Environmental Education Center opened in the summer of 2004. This Center is one of two such facilities managed by the Environmental Lands Division of the Department of Environmental Management. At 25,000 square feet, the state-of-the-art Center is a place where residents and visitors can experience, discover and understand what makes Brooker Creek Preserve special. In addition to providing visitors an opportunity to experience the ecology of the Preserve, the Center focuses on the importance of conserving and managing our limited natural resources.

At the core of the Center is the Exhibit Hall featuring 22 interactive exhibits for visitors to enjoy and learn about the Preserve's ecosystems, including the flora and fauna that live there, and our interactions with them. Hands-on exhibits, dioramas and high-tech media seamlessly mix to provide exciting experiences for all visitors. Two classrooms/ laboratories offer opportunities for groups to delve deeper into topics and issues beyond the exhibits and displays. Also, a 200-person auditorium affords an exceptional setting for presentations, workshops, and special events as well as serving as a gallery space for local artists to display their work.

### ***Weedon Island Preserve Cultural and Natural History Center***

The Weedon Island Preserve Cultural and Natural History Center provides an overview of the rich marine resources of the Preserve and the interrelationship of the environment with the prehistoric, historic, and modern cultures that once inhabited the Preserve. The mission of the Center is to interpret the natural, cultural, and archaeological history of the Preserve in order to demonstrate how the environment and people support and shape each other. This is accomplished through interpretive tours and hikes, educational programs and curriculum development, exhibits and public outreach activities, presentations and workshops, and other



***Kayaking at Weedon Island Preserve***



***Boardwalk at the  
Weedon Island  
Preserve***

events. Designed with the help of Native Americans, and keeping with their tradition, the orientation of the Center in the landscape is along the four cardinal points of the compass with the entrance facing east. A special curved wall is representative of the remarkable pottery of the early Weeden (alternate spelling) people that lived on the island some 1,000 to 1,800 years ago. Portions of the Preserve are on the National Register of Historic Places. The Center opened in December 2002 and includes two observation decks, a multi-purpose room, an exhibit gallery, and a classroom.



## ***Sawgrass Lake Park***

Located in central Pinellas County, Sawgrass Lake Park provides many opportunities for a close examination of the flora and fauna typical of this area. The Anderson Environmental Education Center combines classroom, laboratory and display facilities. It represents the combined efforts of the Southwest Florida Water Management District (SWFWMD), the Pinellas County School Board and the Pinellas County Park Department. These organizations are working together to provide the general public and school children with insight into the environment in which they live. Two Park Naturalists and a dedicated Environmental Education Resource Teacher offer nature tours and outdoor field trips for thousands of visitors and school students annually.

## ***The Florida Botanical Gardens***

The Florida Botanical Gardens are designed to educate visitors by showcasing flora, fauna, and natural resources in surroundings that motivate the visitor to practice environmentally-sustainable techniques. The Botanical Gardens implements interactive, age-appropriate exhibits in both the Garden and the Visitors Center; develops and utilizes leading edge resources and research information; works closely with educational, vocational, social, and cultural institutions locally, statewide, and regionally; and integrates sustainable practice education into the exhibits and programs. By applying the principles of green architecture, utilizing energy- and water-efficient xeriscape techniques, and adhering to the principles of climate-appropriate design, the Botanical Gardens serve as a model of conservation and sustainable practice.



## ***Pinellas County Extension***

The Pinellas County Extension is a Resource Center that is an extension of the University of Florida, dedicated to providing research-based information to Pinellas County citizens. The Extension educates residents through their website and through classes held on a variety of topics, including: lawn and garden, commercial horticulture, families and consumers, 4-H youth development, and the environment.

## ***Other Beaches/Parks/Preserves***

Through signage and informational kiosks, Pinellas County educates residents in many of its other parks and environmental lands. Each County-operated boat ramp has an informational kiosk next to it describing manatee protection and other ways that boaters can protect the environment while enjoying the water. The County also provides bins to collect fishing line at each boat ramp, and signage to educate boaters about the impacts that improperly discarded lines can have on marine life in the area. A number of the other parks and environmental lands contain signage or brochures, educating residents about native flora and fauna and how these resources can be protected from adverse human impacts.