

Sustainability Practices of Charlotte County Utilities

By Terri Kesner, Charlotte County Utilities Director

Twenty-four hours a day, seven days a week, somebody, somewhere in our community uses Charlotte County Utilities (CCU) water, wastewater, or reclaimed water. Our products make important differences to the quality of people's everyday lives. Over time, we have needed to adapt to new regulations and trends, while at the same time reducing our environmental impacts. The actions we have taken over the past few years to manage our resources took into account our customers, our beautiful Charlotte County lands and waterways and the environment that surrounds us. Our strategic plans have been designed to reduce our footprint across the whole lifecycle of our utility products, while creating and maintaining sustainable supplies for our citizens.

As a member of the Peace River Regional Water Supply Authority, with the source of water being the Peace River, we have used best management practices to develop and maintain our water supplies. In 2005, when all the members of the Authority identified there was insufficient capacity at the water treatment plant and the 600 million gallon reservoir to handle the growing needs of the communities it served, a new 6 billion gallon reservoir was added to the storage facilities and the plant was expanded to 32.7 million gallons per day (MGD) of capacity. Around the same time, it was identified that Charlotte County's Burnt Store Water Treatment Plant needed to be upgraded to serve the needs of neighboring residents, so the county increased the capacity from 0.5 MGD to 3.6 MGD. All of these upgrades were performed in an environmentally sensitive manner so as to carefully guard the ecosystem, while increasing water supplies for today and tomorrow.

Regional water system interconnects are an integral component of the sustainability program by providing a safety net and allowing participating utilities to share water in case of an emergency. In the aftermath of Hurricane Charley, the City of North Port assisted CCU with efforts to provide drinking water to its customers through their bi-directional water interconnect. Other emergency water interconnects currently exist between Charlotte County and Englewood Water District, Gasparilla Island Water Authority, Charlotte Harbor Water Association and Little Gasparilla Water Association. Additionally, the county is in the process of interconnecting with the City of Punta Gorda and hopes to build interconnects with the City of Cape Coral and Lee County within the intermediate future. Partnerships are key to sustainability planning, by collectively working to ensure adequate water supplies are in place to serve our customers.

Wastewater is another area of our sustainability commitment plan to our customers. Over the past 15 years, Charlotte County has been upgrading all the wastewater plants to water reclamation facilities, with the capability of producing a total of 9.7 MGD of drinking-water quality reclaimed water. Reclaimed water can be used in place of potable drinking water for industrial, landscape, and recreational uses and is

commonly used by golf courses to irrigate their greens. This is a perfectly safe and responsible way to conserve by returning highly disinfected wastewater back to the aquifer, as part of its life cycle. The more we reuse wastewater for non-potable purposes, the more drinking water we save for other purposes. In 2009, through the reclaimed water program, we were able to conserve enough potable water to serve our customers for an extra 70 days.

The county's sustainability program includes the use of advanced technologies to produce organic waste biosolids that are used in combination with green yard waste to produce a composting material, that is then used as daily ground cover at the Zemel Road Landfill. Couple this green technology with the transported waste receiving facility and the grease receiving program, and you have demonstrated an environmentally protective and sustainable methodology of handling the waste needs of the community. The transported waste receiving facility and grease receiving program recover septage, oils and grease from entering into the environment as pollution and places them safely in the waste treatment process for proper disposal and for potential use as a feedstock, soil enhancement product or useable bio-diesel fuel.

Every day, CCU is making a difference in people's lives and working hard toward making Charlotte County a better place to live, work and play. By planning for our future through the creation of sufficient supplies to handle our community's needs, while preserving the quality of life we all enjoy, we all win—and that feels good.