

CCU Conserves Resources

By Terri Kesner, Charlotte County Utilities Director

Charlotte County Utilities (CCU) takes great pride in its efforts to conserve resources and preserve the water quality in Charlotte County. CCU uses a multi-prong approach to this effort, which includes making improvements to our wastewater collection system, disposing of our biosolid waste in an environmentally-friendly manner, expanding the use of reclaimed water as an alternative to potable water for irrigation, and aggressively maintaining our water distribution system so as to provide a reliable, high quality source of drinking water for our customers.

At the core of our wastewater collection system are hundreds of miles of pipelines that collect and transfer wastewater to one of the four treatment plants. Our pipeline rehabilitation program uses state of the art lining materials to seal the internal pipes so as to inhibit groundwater infiltration and raw wastewater exfiltration from the pipeline system. This program provides a reduction in wastewater flows to the treatment facilities, which, in turn, defers the need for a treatment plant expansion. An additional benefit includes a reduction in pollutants leaching from the cracks or holes in the older piping into the surrounding groundwater and aquifers. This program has worked very effectively for the county and demonstrated noticeable decreases to the quantity of wastewater flows entering our treatment plants.

The second approach to conservation is based upon a joint venture between CCU and the Landfill, which uses the organic waste material from our wastewater treatment facilities (bio-solids), along with green yard waste. These materials then get processed into composting material, which is used for ground cover at the Landfill, saving both CCU and the Landfill hundreds of thousands of dollars previously spent on other means of disposal and dirt.

The third means of practicing conservation is based in the cross-county reclaimed water transmission main that travels from the East Port Water Reclamation Facility to the Riverwood development near the El Jobean Bridge. While this piping system currently allows for reclaimed water distribution to large commercial customers, future efforts will focus on providing availability to residential customers as well. The goal here is to reduce reliance on potable water resources for irrigation, through the recycling of highly disinfected wastewater, which is exactly what SWFWMD wants each county in their 16 county districts to do.

One of our wastewater treatment plants was upgraded to a larger capacity in 2009, using an energy efficient membrane process for the treatment of sewage influent. This upgrade of the Rotonda Water Reclamation Facility has allowed CCU to provide a very high quality reclaimed water product to our West County customers, which include golf courses and several commercial accounts. Additionally, this facility now enables us to store approximately five million gallons of reclaimed water for times of drought.

Our largest wastewater treatment facility, called East Port, is the main site for treating the fats, oils, and grease that are removed during the wastewater treatment process in all of our plants. We are currently in the research process to secure a private partner willing to turn these treatment by-products into useable bio-diesel fuel or a soil enhancement product. We hope to have this new program in place in the next few years.

Lastly, CCU continues to make large strides in efforts to provide reliable high quality drinking water to our customers. Over the past three years, CCU has replaced several old steel piping systems that were rusting, added new water main extensions on dead end streets, installed numerous automatic flushing devices so as to decrease the need for manual labor, and completed the rehabilitation all of our water booster storage tank facilities. These infrastructure enhancements will enable CCU to reduce the need for flushing large volumes of water through the distribution system in order to meet the required water quality standards.

As you can see, CCU is a very proactive, forward-thinking organization. The management staff consistently seeks new methods and technologies to conserve resources for the benefit of our customers and the environment. We will continue to do so as we continue in our efforts to provide the highest quality products to our customers, while preserving the beautiful environment we all live in.