

Reclaimed Water FAQs

By Terri Couture, Director of Charlotte County Utilities

Charlotte County Utilities (CCU) has been working steadily for the past few years on expansion of our reclaimed water (RW) system facilities. The goal is to reach golf courses in central and west county from any of the three water reclamation facilities (East Port, West Port and Rotonda) that serve those areas. Water management districts and other government agencies support RW as an alternative water supply source and have been providing assistance to CCU with cooperative funding and educational grant programs in order to promote the reuse of RW. Because the production and distribution of RW is heavily regulated, municipal facilities must treat the water with a six-step removal, filtering and disinfection process before delivering it to consumers through a RW distribution system. These facilities are continuously monitored to ensure that only high-quality RW goes into the distribution system. Make no doubt about it, RW that has been treated to this level is essentially pathogen-free, sparkling clear and can safely be used by residents for irrigation and by businesses for irrigation, cooling and other industrial purposes.

How long has RW been used in the U.S.?

Highly treated RW has been used in the U.S. for over 100 years, with its origins dating back to 1912 when San Francisco used it to irrigate Golden Gate Park. Florida began its use of RW in 1966 with the construction of the Tallahassee Reclaimed Water Farm. Usage throughout the State has continued to grow and Florida is the nation's leader today, reclaiming close to 700 million gallons of water per day. CCU customers used 432,395,000 gallons of RW in 2010, saving 42 days' worth of potable water.

Is it true that RW is not for human consumption and may include bacteria, e-coli, or salmonella?

RW is absolutely not intended for human consumption, but there have been no incidences of illness or disease from either microbial pathogens or chemicals as a result of using RW for irrigation supply. Rule 62-600.440(5), of the Florida Administrative Code (F.A.C.) essentially requires that fecal coliforms be reduced below detection levels. Florida's high-level disinfection criteria were designed to ensure that the RW would be essentially virus-free. It is a recycled product of water that works very well as a source of irrigation for landscape materials, fruits, vegetables and crops and the Florida Department of Health and the Department of Environmental Protection have found that RW poses no threat to public health.

Do you have to wash with soap and water after skin contact with RW?

Incidental contact with RW, such as being splashed or sprayed by a sprinkler, is safe for people and animals, as RW is treated with high levels of disinfectants. However, RW is not the same as potable water and is not intended for drinking or other activities such as bathing, swimming pools or laundry.

Is it true that chemicals are used to stabilize RW and then chlorine is used to clean lines, which then gets disbursed onto soil and plants, etc.?

No stabilizers are used in the process to produce RW. Chlorine is used for disinfection of RW prior to distribution as irrigation for lawns and landscaping, public use areas, and edible food crops. If you are watering your lawn with a garden hose on any water system in the United States you will have chlorine or some form of disinfection in the water which gets disbursed onto the soil and plants. Chlorine dissipates rapidly once exposed to air.

Is RW normally higher in salinity?

Our chloride level (salinity) averages around 160 parts per million, which is less than the state allowance for utilization of RW. The salt content is low enough that RW will not harm sensitive plants. Additionally, RW has a low iron content that will not stain walkways and buildings.

Does RW etch glass when irrigation hits glass?

RW is no harsher to glass than hard potable water, which can stain the surface of glass. This often happens after repeatedly washing glassware in the dishwasher. It is recommended that RW be applied through the use of root-zone irrigation, such as drip irrigation or soaker hoses so as to avoid repeated spraying on windows.

What other uses are there for RW besides irrigation?

RW is an excellent alternative water source for industrial applications, such as plant wash down, power generation and air conditioning systems for large buildings. RW is also used extensively to help restore natural systems that have been experiencing a decline in water levels by recharging them into a better functioning wetland. This type of project has a secondary benefit by recharging the aquifer at the same time it restores the wetlands.

Lastly, RW is being used extensively throughout the country to augment surface and ground waters that are used for drinking water supplies. Tampa Bay has an innovative project that will save 26 million gallons of potable water per day. By utilizing 55 million gallons of RW during the wet season to recharge to the upper Hillsborough River watershed, wetlands and stream flows are boosted which eventually get withdrawn downstream for potable water purposes.