

## Riverside Nature Center's New Rainwater Collection System



Kerr County residents live in a world of water shortage. We receive an average rainfall of 32 inches. According to estimates and monitoring, approximately 2/3 of that rainfall is lost to evaporation and runoff. The remainder is available for soil and plant material. Monitoring wells in the area indicate that we are currently very close to a stage 1 drought. In recent years we have progressed through drought stages 1, 2 and 3 each stage being more serious. Current population is about 42,000 and some estimates say that the population will double by 2050. There are many statistics concerning water availability and water usage for the county, but no matter how you analyze these stats we have the potential of a serious water shortage in the not too distant future.

With this in mind, Riverside Nature Center (RNC) has decided to take action. No, they cannot make it rain more as the population increases, but they can collect some of the available water that comes in the form of rain. They have designed and installed the beginnings of a rainwater harvesting system. In very basic terms it collects the rain that falls on the roof, directs it from the rain gutters into a piping system that eventually ends up in a 5000 gallon storage tank -- all done by gravity. This water feeds the drip irrigation system that waters the Center's trees and plants. As a point of fact, a 1000 square foot roof surface will supply approximately 600 gallons of rainwater per 1 inch of rain. RNC collected approximately 2500 gallons of water in the last 1 inch rainfall. Think about these numbers! That's a lot of water from just 1 inch of rain that did not have to be supplied by the city.

Riverside Nature Center had several objectives when planning their rainwater collection system. According to John Quinby, RNC Director of Building and Landscape, the first objective was to supplement the use of city water (which costs money) with rainwater (which is free) for irrigation needs. Rainwater being collected today at RNC is filtered but not potable. The second objective was to utilize the system for public education by providing a working example where citizens can learn to 'build' a system at their home or business for either irrigation or use indoors. Signage will be added to explain the installation, provide specifications, and offer alternatives. Because RNC believes that the educational aspect of rainwater harvesting is as important as the actual water capture, future plans include public classes.

With this installation, Riverside Nature Center becomes a premier public location for the display and education of rainwater collection. RNC believes that in today's water conscious world, this is a 'big deal'. The entire RNC system was made possible through donations and volunteer work. Plans are currently underway to expand the capacity of the system so that more rainwater is available for grounds irrigation.

Riverside Nature Center welcomes everyone to come by for a demonstration, to attend one of the upcoming classes, or to simply stop by for a look. To donate to the expansion system, to volunteer, or to ask about classes, please contact the nature center at 257-4837. The RNC Visitor Center is open to the public on weekdays from 9 to 4, and on weekends from 10 to 3. Riverside Nature Center is located at 150 Francisco Lemos Drive just north of the river. TXDOT will soon begin construction of the Francisco Lemos Drive bridge, but the street will remain open to the nature center, so do not let the construction deter you.