



## Harvesting Rainwater

Although close to three-fourths of our planet is made of water, not all of it is suitable for use. The water in the oceans and seas cannot be used as drinking water and little of it can be utilized for other purposes. As a result, there are shortages of water good for drinking or for home and agricultural use. Throughout all of recorded time, areas that have faced water shortages were able to combat this problem by harvesting what little rainwater they received. This slowly started spreading to areas where there was plenty of rainfall. As a result, the modern day rainwater harvesting system has evolved into one of efficiency and abundance. Our periodic Texas droughts mandate that we at least explore rain capturing as an alternative to pumping the limited supply of groundwater.

The Comal Trinity Groundwater Conservation District (CTGCD) is working with an action committee composed of the Texas A&M AgriLife Extension Service, Dr. Steven Grainger, Dr. Larry Sunn, and the Comal Master Gardeners gardening group, to promote rainwater capture, thereby reducing stress on our Trinity and Edwards aquifers. They work with developers and builders to explore whole-house alternatives to the costs and inconsistencies associated with drilling groundwater well systems. Periodic updates on their work, analysis, and recommendations will be published in the *Front Porch News*, *Canyon Lake Living*, and *Spring Branch Neighbors*.

Whether in buckets, barrels, or large tanks, capturing rainwater for your home and landscaping use is an innovative alternative water supply approach anyone can use. Rainwater harvesting captures, diverts, and stores rainwater for later use.

Implementing rainwater harvesting is beneficial because it reduces demand on existing water supplies, and it decreases run-off, erosion, and contamination of surface water. Rainwater can be used for nearly any purpose that requires water. A rainwater harvesting system can widely range in size, cost, and complexity. There are both “wet” and “dry” systems, but all systems have similar basic components, including a catchment surface, conveyance structure, storage system, distribution method, and treatment procedure.

To reduce the consumption of our groundwater, many Hill Country neighbors are installing or switching to rainwater harvesting systems. Their experiences are included in the action committee’s agenda. Like the many harvesting systems of these forward thinking homeowners, an inexpensive rainwater capture system can be used as your sole or primary source of drinking water. We will publish options and information here to help you design your own system.

The best thing about rainwater is that it is free from pollutants as well as salts, minerals, and other natural and man-made contaminants. In times of excess rainfall, the surplus rainwater will overflow and can be used to recharge groundwater through innovative artificial recharge techniques.

If you’d like additional information on designing a system—large or small—contact Dr. Sunn at [Texsunn@gmail.com](mailto:Texsunn@gmail.com). Either he or others on the action committee will meet with you to discuss rainwater harvesting alternatives regarding system design, capture rates and losses, tank sizes, costs, or even installation of turnkey systems. Working together we can reduce stress on our aquifers, and we can help you obtain sustainable, safe water for your home.