## education conservation cooperation



## Texas House Bill 3391 - The Rainwater Harvesting Bill Passes

## Promotes rainwater harvesting for both potable and non-potable uses

The passage of Texas House Bill 3391, known as the Rainwater Harvesting Bill, represents a giant step forward for conservation of water resources and water security for the state. Rainwater harvesting is one of the best solutions to limited water resources and an increasing demand on water supply in Texas.

"I am proud and encouraged that such watershed legislation has moved through the process as far as it has. I am optimistic that it will make it to the Governor's desk for his signature," says Rep. Doug Miller (Dist. 73: Bandera, Comal, Gillespie, Kendall) who carried HB 3391. "Through incentives, we all have a first-hand opportunity to protect our state's precious natural resources. This legislation helps to raise Texans' awareness of the many benefits of rainwater harvesting."

HB 3391 provides rule-making changes that promote rainwater harvesting for both potable and non-potable (drinkable and non-drinkable) uses. The bill also offers incentives for installing rainwater harvest systems in homes, businesses, schools and government buildings. It even makes provisions for funding rainwater harvesting demonstration projects throughout the state.

"Representative Miller truly is looking out for the needs of the Texas Hill Country," Christy Muse, Hill Country Alliance (HCA) executive director says. "This special region desperately needs new tools to deal with a tremendous amount of unmanaged growth in an area with very fragile water resources. Rainwater harvesting is one of those tools."

"I appreciate so much that Rep. Miller took the bull by the horns and worked with knowledgeable people like John Kight and the San Antonio Water System to present a good bill," says Karen Ford, HCA board member and former Hays County Commissioner. "Going from non-potable to potable uses for rainwater is huge." Before passage of the bill, use of harvested rainwater inside a structure with public water supply was restricted to non-potable purposes such as landscape irrigation, laundry and toilet flushing.

John Kight, known throughout the Texas Hill Country as the "Rainwater Guru," says he is relieved that the bill has passed. "I have worked for years on this bill," Kight says. "I worked with Rep. Patrick Rose two years ago on a rainwater harvesting bill, but the bill died during the legislative session." This year, Kight worked with Rep. Miller to refine the bill, and he provided expert testimony to the House and Senate Natural Resources Committee.

Kight teaches classes on rainwater harvesting, and more than 2,000 people have visited his home to see his system, which is capable of collecting 41,000 gallons of rainwater. He and his wife use rainwater for everything inside and outside their home. They have no well and no surface water supply. With only two inches of rain so far this year, Kight says they still have 30,000 gallons of water in storage.

One of the most important things the bill does, according to Kight, is change the Texas Commission on Environmental Quality (TCEQ) rules on rainwater harvesting to encourage new state government buildings to have rainwater catchment systems for non-potable uses. Kight is also glad to see that the bill encourages financial institutions to make loans for homes, businesses and developments that will use harvested rainwater as the sole source of water supply.

The bill also changes the local Government Code to make it possible for counties and cities to offer incentives for rainwater harvesting such as discounts on rain barrels or rebates on water storage systems at residential, commercial and industrial facilities.

There has been some concern about safety regarding possible contamination of the public water supply with rainwater. These concerns have been addressed in HB 3391 with provisions for preventing backflow and for training permitting staff. The bill also protects any municipality from being held liable for adverse health effects that might be attributed to mis-use of harvested rainwater.

"It is very simple to prevent back-flow with a check valve or air gap," Kight says. He notes that there is little or no reason to worry about contamination of the public water supply with rainwater because there is no reason to connect the public water supply to the rainwater system inside a house or building.

"The Rainwater Harvesting Bill actually addresses that rainwater harvesting is a conservation tool and that money should be provided for incentives and further study," Kight says.

While Kight believes that most systems will be used only for non-potable uses, he is a convincing advocate for using rainwater for everything. "Our system is designed for a drought of record," Kight says. "We use about 100 gallons a day and we can go 300 days without rain."

The cost of installing a rainwater harvesting system as well as maintenance and use of electricity compare favorably with costs to dig, maintain, treat the water and run the pump for a groundwater well. Generally, professional installation for a basic rainwater system is about \$1.25 per stored gallon, and less if you install it yourself. Adding the water purification system for potable use adds about \$1,000 to the total cost.

From a 6,500 square-foot roof, Kight's system collects 4,000 gallons per inch of rainfall. He uses filters and ultraviolet light to purify the water. Kight says when he shows people how his system works, they are surprised to see how simple it is. If the fresh, clean taste of rainwater doesn't convince you, he will show you the crystal clear ice cubes from his ice-maker made from rainwater. That will do it.

To find out more about rainwater harvesting, make plans to attend the 2nd Annual Rainwater Revival, October 8, 2011 at Roger Hanks Park in Dripping Springs, TX. The event combines education and entertainment with speakers on a variety of rainwater harvesting topics, live music, auction of artist-decorated rain barrels and more. Visit www.rainwaterrevival.com for more details.

The Hill Country Alliance (HCA) is a non-profit organization whose purpose is to raise public awareness and build community support around the need to preserve the natural resources and heritage of the

Central Texas Hill Country. Please visit the HCA website, <u>www.hillcountryalliance.org</u>, for more information about the latest news, events and initiatives, and how you can contribute to our activities.