

WATER HARVEST

Many places, especially in Texas, are seeing the effects of drought. Water restrictions are enforced all over the state limiting resident's use of water.

In Aspermont, Texas, residents are restricted to stage four water use, which is 6,750 gallons per meter per month. The community receives its water supply from Miller Creek Reservoir, which is south of Seymour, Texas, and at 18.8 percent capacity.

This is where Natural Resource Conservation Service and Texas A&M AgriLife Extension's simple water harvesting system comes in to play.

The Stonewall County Soil and Water Conservation District in Aspermont has teamed up with the Natural Resources Conservation Service and the Texas A&M AgriLife Extension Service to create a water-harvest demonstration site. After gaining permission from the landlord, the Stonewall County USDA Service Center installed gutters on the south side of the building.

This water harvesting system is simple. Gutters and rain collection barrels is all that is needed to start collecting water, and it can make a big impact.

"The approximate rainfall that is captured from a roof is 0.62 gallons for every square foot," said Jacob Shaffer, Natural Resource Conservation Service District conservationist. "We have estimated a one-inch rain will runoff approximately 450 gallons."

Shaffer estimates a 1,000 square-foot-roof could capture approximately 5,000 gallons of water with only eight inches of rainfall.

Rainwater is an excellent source to water grass, trees and flowers due to no added chemicals or salts.




Jacob Shaffer (left) works with clients through the Natural Resource Conservation Service.

"The water in Aspermont is high in salts and can clog faucets and leave a white residue on dishes and can be detrimental to plants," Shaffer said. "Rainwater is as fresh and clean as the effort used to clean the water."

Rainwater can also be used for in-home use, wildlife and livestock and fire protection. Rainfall capture systems are also helpful in storm-water management, as they collect water and prevent runoff that causes erosion according to Texas A&M Agrilife Extension website.

The rainwater captured from the demonstration site at the Stonewall County USDA Service Center is being used to water their potted garden, which is full of lettuce, cabbage and broccoli. The center also waters an elm tree and crape myrtle. Currently the district has 680 gallons of storage.

"The main reason we installed the system," Shaffer said, "was to have a demonstration site for local residents to visit to see how simple a water harvesting system can be."

Water harvesting and conservation is not a new concept, but it is a more discussed topic in recent years due to drought. The state of Texas offers a sales tax exemption on the purchase of rainwater harvesting equipment. 



Barrels used for water storage.



Storage for the water harvest system.

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