

RAINWATER HARVESTING

Moore County averages around 48" of rainfall annually. This is well above the average for most of geographic areas of the United States. Wells and surface water supplies from streams and impoundments are normally sufficient to supply our domestic and irrigation needs in most years. There have been years of extended drought in the warmer months of the year that stress our supply systems and result in water shortages and the subsequent water use restrictions. It is during these times it would especially be of benefit to have a backup system.

Rainwater harvesting could aid the homeowner in times of drought. This is not a new technique since for centuries various practices have been used to capture rainwater in cisterns and other types of containers for use during droughts. Many countries currently capture rainwater for long term potable consumption in areas where it may not rain for months at a time.

In Moore County a properly sized underground storage containment could provide all the requirements for both turf and landscape ornamentals. For example a 5000 gallon underground tank could provide enough water to irrigate 2500 square feet of turf at one inch of irrigation per week for 3.5 weeks. It would be an infrequent occurrence for there not to be any rainfall for more than 25 days most times throughout the year both for recharging the tank and supplying water to turf or landscape plantings.

The typical recharge of the underground containment would come from water harvested from the roof. With an average of 48 inches of rainfall a year, 2500 square feet of roof would yield over 67,000 gallons of water annually! With little to no outside irrigation requirements 4-5 months a year, the right size system could provide homeowner needs quite easily.

Is it economical? If you could save the cost of a new well or irrigation water meter it could prove beneficial. The cost for a 1000 gallon underground concrete tank is around \$600. The smaller tank would be more applicable for strictly ornamental shrubbery. This is without installation, pumps, electrical and piping from the roof to the tank. A larger tank or combination of tanks would be advisable if turf irrigation is part of the equation. Over many years the cost of water and monthly water service would be saved.

A local home designer, who has integrated this system at his personal residence, offers it as an option to new clients planning home construction. This system is a little less expensive if done during initial construction.

Rainwater harvesting could be a viable option for supplying your outside water requirements for ornamentals and turf. It falls into the category of a green initiative and is being used in many communities throughout the United States. It is a long term

investment and would also enable you to irrigate even during times of municipal water restrictions.

You will find most municipalities have ordinances relative to above ground tanks and minimal requirements for underground tanks. Please check with your local town ordinances for specifics. Also check neighborhood covenants and restrictions and your property easements before installing a tank.