

# Making the most of your Rain Barrel

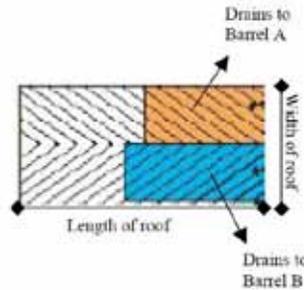
Now that you have a wonderful water saving rain barrel, how do you make the most it?

The better your understanding of how rainwater and stormwater works at your home the better use you'll make of your rainbarrels helping you place them in the best locations, where they will receive the most use, and adequate rain.

First, you can estimate the number of gallons you can harvest from your roof (or any catchment area) with the following simple formula.

$$\text{Harvested water (in GALLONS)} = \text{Roof Area (square feet)} \times \text{rainfall (inches)} \times \text{gallons per sq ft (0.623)}$$

For a 1inch rainfall on an average house the equation would be 1,000 square feet x 1 inch rain x 0.623 gallons/sq ft = 623 gallons. Next, partition your roof according to where your downspouts are located. Just approximate as it's difficult to know exactly. In the drawing above roughly 1/4 of the runoff goes to barrel A, and ~1/4 goes to barrel B. For a one inch rainfall you'd expect 155 gallons to go to each barrel. These new diverter kits won't divert 100% of the runoff, which is fine since a one inch rain (155 gallons) could fill a barrel nearly 3 times. Since avg rainfalls in Habersham County are about 52 inches annually a home of 1,000 sq ft generates 32,396 gallons of water in runoff, much more than you could ever use for outdoor irrigation. The important thing to consider is the quadrants of your house that generate adequate runoff and are close enough to your thirsty plants.



## Rain Barrels and Rain Gardens THEY GO TOGETHER

The key for making the most of your rain barrel is actually having a garden space nearby that benefits from your stored rainwater. Rain gardens are a planted depression where runoff can be absorbed into the ground and are an excellent companion to rain barrels as they work together to reduce stormwater and increase water infiltration. If you are interested in learning more about rain gardens we have a publication on how to build a rain garden available on our website [www.soque.org](http://www.soque.org).

## Paint your barrel

Nothing will increase your satisfaction with your new rain barrel more than painting a personal scene on it. Just prime with Krylon® and use plastics paint.



**Project made possible by:**  
Soque River Watershed Association  
(706) 754-9382  
[www.soque.org](http://www.soque.org)  
[soque@windstream.net](mailto:soque@windstream.net)  
**You can support this program by becoming a member**



Distribution of rainbarrels is generously provided by Habitat for Humanity in Clarkesville (706) 754-5313; and in Clayton (706) 212-2059



**Thank You** to the Coca-Cola Company for donating the barrels that are converted into rainbarrels.



**Special Thanks also to** The North Georgia Technical College for their Truck Driving School that transports barrels, for hosting our summer workshop, and for storing barrels in their barn.



# Harvesting Rain with Rain Barrels and Cisterns

*A project of the Soque River Watershed Association*



Barrels available for purchase at Habitat ReStores in Clarkesville & Clayton



*A rain barrel is a container that collects and stores water from roofs and downspouts for future uses such as watering lawns, gardens, and house plants; cleaning off gardening tools; and washing your car. A group of local partners is working to make rain barrels a routine part of our communities and neighborhoods. A cistern stores larger volumes of water 300-5,000 gallons and can be used for both outdoor and indoor uses.*

Rainwater harvesting is one of the easiest and most practical ways to implement water conservation practices into the home, business or institutional landscape. There are numerous benefits of re-utilizing rainwater:

- **Saves Money** - Rain barrels help to lower your water bills, particularly in the summer months by collecting potentially thousands of gallons of free water a year that you don't have to buy!
- **Conserves Water** - Fresh water in streams, and in the ground is a precious commodity in shorter and shorter supply in the North Georgia mountains. Re-using rainwater reduces the strain put on our river and groundwater supplies by utilizing water that would have become stormwater runoff. Nearly all outdoor irrigation could be accomplished with captured rainwater rather than treated drinking water, conserving water in the summer when demand is highest. In fact, chlorinated water isn't good for plants or soil micro-organisms.
- **Reduces Stormwater** - When rainwater flows across roads, driveways, and compacted soils it carries with it many pollutants such as oils, antifreeze, and sediment. Rain barrels and cisterns are a good starting point in reducing the volume of runoff that can actually cause stream scour, failing streambanks and other hydrologic and pollutant problems associated with stormwater runoff.
- **Reduces the Cost of Future Water Development** - the costs of providing for growing water demands is extraordinary. Per gallon, dams can cost up to 8500 times more than water efficiency investments. To reduce the taxpayer burden for water infrastructure we all should invest in inexpensive water conservation practices.

This brochure will show you how to make your own rainbarrel by following a few simple steps!

# How to Install a Rain Barrel

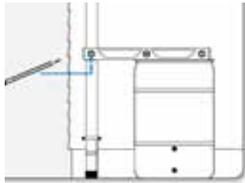
Thanks to our partnership with Upper Chattahoochee Riverkeeper we are now able to provide a new and improved rainbarrel kit making it easier and more efficient to install a barrel that is sealed (no insects), returns excess runoff to your storm gutter (reducing overflow problems), easy to disconnect and drain in the winter, and costs less.



**STEP 1 - TOOLS NEEDED** -You'll only need a handful of tools to install your rainbarrel: A drill, shovel, level, scissors, tape measure, and pencil (or pen). The Do-It-Yourself Rain Barrel Diverter has the following **KIT SUPPLIES**: FlexiFit Diverter, 3 ft hose, spigot, 3 hole saws, water seals and cover.



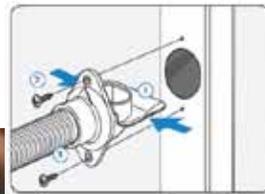
**STEP 2** - Pick a location close to your downspout and prepare a level area so that the barrel is stable (confirm using the level). Bricks or cinder blocks can be used to slightly elevate your barrel if needed.



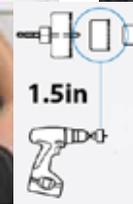
**STEP 3** - Next slide the level towards the downspout. The hole for the diverter will be drilled even with the height of the barrel. Don't drill too high or too low.



**STEP 4** - The kit comes complete with three hole saws that are the appropriate sizes to drill a downspout hole (2<sup>1</sup>/<sub>8</sub>inch), the connector hole (1<sup>1</sup>/<sub>2</sub>inch) and the spigot hole (1<sup>1</sup>/<sub>4</sub>inch). The largest hole saw (2<sup>1</sup>/<sub>8</sub>inch) is used to drill into the metal downspout. If you're cautious you can avoid pushing the drilled metal circle into the downspout.



**STEP 5** - Now insert the FlexiFit Diverter which diverts a portion of the water from the downspout to the barrel but once the barrel is full allows rainwater to stay in the downspout. The cup is in my left hand. To insert the FlexiFit Diverter, simply pinch the cup upwards before inserting straight into the hole in the downspout (don't twist). Make sure the arrow on the front of the diverter is facing up. Attach the Diverter to the downspout using the two screws included with the Kit.



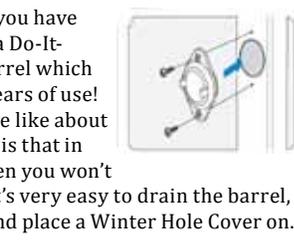
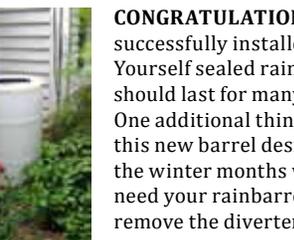
**STEP 7** - Now that you've established how your rain barrel will sit relative to the downspout you're ready to drill your connector hole. Measure 3" down and use the 1<sup>1</sup>/<sub>2</sub>inch hole saw. Insert the water seal into the connector hole by pinching into a C shape in order to fit into the hole.



**STEP 8** - Next you'll measure for a hole for the spigot. If you just plan to use a hose on the barrel you can place this hole 3 inches from the bottom. If you want to get a watering can underneath you may want to place 10-12 inches from the bottom. The kit actually comes with a second plug that you can insert so that you can drain the last 10 inches of water in the winter. Once you drill the hole, insert the threaded rubber seal by pinching into a C shape to fit into the hole.



**STEP 9 & 10** - Simply screw the plastic spigot into the threaded rubber seal and put the barrel back into place and insure it's level. Insert the 3ft hose into the diverter and using the scissors cut off any 12 inch sections that are not needed to reach the barrel. Push hose into the connector seal in back of the barrel.



**CONGRATULATIONS** you have successfully installed a Do-It-Yourself sealed rainbarrel which should last for many years of use! One additional thing we like about this new barrel design is that in the winter months when you won't need your rainbarrel it's very easy to drain the barrel, remove the diverter, and place a Winter Hole Cover on.

