

A Do-It- Yourself Guide for Rain Barrels



**Georgetown County
Department of Public Services
Stormwater Division**

Rain barrels capture water from a roof and hold it for later use such as on lawns, gardens or indoor plants. Collecting roof runoff in rain barrels reduces the amount of water that flows from your property. It's a great way to conserve water and it's free water for use in your landscape. The benefits of using a rain barrel / rainwater harvesting include:

- Free water supply
- Chlorine free; salt free
- Soft water (no calcium carbonate)
- Often charged with nitrogen from the atmosphere
- Reduces energy-intensive demand from water treatment plants
- Reduces your water bill
- Stormwater runoff is reduced; less pollutants running down stream

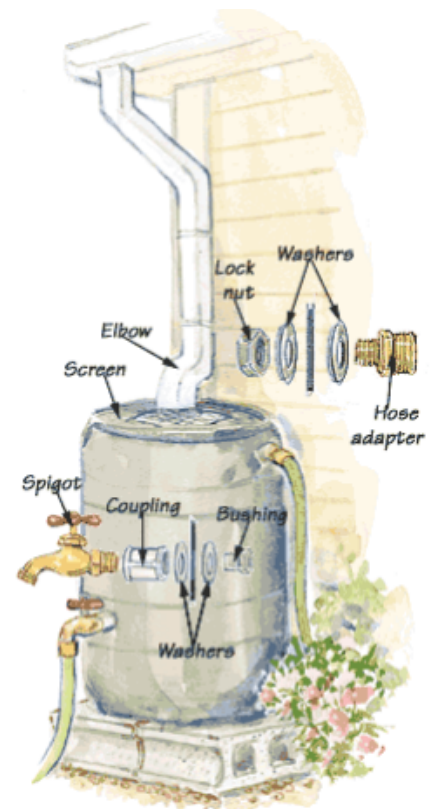
The Materials and Tools that you will need to construct your rain barrel include:

Materials:

- 1 clean 30-to 55-gallon barrel or garbage can
- 1 "S"-shaped elbow with pop rivets or sheet metal screws
- 2-3 concrete blocks
- 1 piece of window screen
- 1 spigot with $\frac{3}{4}$ -in. pipe threads
- 1-in. standard hose fitting
- 1 $\frac{3}{4}$ -in. x $\frac{3}{4}$ -in. coupling
- 1 $\frac{3}{4}$ -in. x $\frac{1}{2}$ -in. bushing
- 1 $\frac{3}{4}$ -in. pipe thread with a 1-in. hose adapter
- 1 $\frac{3}{4}$ -in. lock nut
- 4 metal washers
- 1 roll Teflon tape
- 1 tube silicon caulk

Tools:

- Hacksaw
- Screwdriver or pop rivet gun
- Drill
- Pencil
- Ruler
- Spade
- Level
- Adjustable wrench



1. If you have a gutter and downspout system on your house or garage, you can build a rain barrel to gather water for your garden. To find a barrel, check with companies that buy bulk food ingredients. Some of their supplies come in large plastic containers. Scrub the inside thoroughly with soap and water to remove any residues. Because they're often hard to clean, barrels that contained motor oil or fuel products don't make good rain barrels. If you can't locate a barrel, substitute a large plastic garbage can.
2. Level the area for your barrel with a spade and set the concrete blocks in place. Place the barrel on the blocks. Hold the new elbow on top of the barrel against the downspout. The bottom of the new piece should reach just above the barrel — an inch or so. Mark the existing downspout where you'll cut it off. Set the barrel and the elbow aside and measure down 2 inches from the pencil mark on the downspout. That'll allow room for the old downspout to fit into the elbow securely. Use the hacksaw to cut off the old downspout. Fit the new elbow over the end of the downspout and fasten it in place with sheet metal screws or pop rivets.
3. Drill a $\frac{3}{4}$ -inch hole in the barrel wall high enough to allow you to place a bucket underneath. Squeeze caulk around the hole on both sides. Assemble the spigot and coupling, wrapping a piece of Teflon tape on each threaded section to form a tight seal. Slip on a washer and poke the threaded end of the coupling through the hole from the outside. On the inside of the barrel put a washer over the pipe and fasten everything together with the bushing.
4. A couple of inches down from the top of the barrel drill another $\frac{3}{4}$ -inch hole for the overflow valve. Squeeze some caulk around the hole, inside and out, and place a washer on the hose adapter and push it through the hole. On the inside slip on a washer and Teflon tape and tighten everything together with the lock nut. With a garden hose connected to this safety valve, you can direct some of the overflow after a heavy rain out into the garden.
5. If your barrel has a lid, cut a hole in it where the new downspout elbow will drain into it. Cover the hole with a small piece of screen. If there is no lid, lay a large piece of window screen over the top. You can leave the barrel uncovered, but you'll find that open water is irresistible to mosquitoes.
6. Set the barrel on the concrete blocks, make sure the downspout will direct the water properly and sit back and wait for rain.

We would love to see your finished product! Please send your pictures to stormwater@gtcounty.org