Rain barrels are a great way to collect natural rain water and use it in the garden. Water can be stored for when it's needed, saving on the cost of watering and preserving this precious resource. A single roof can produce a lot of rain water over the course of a summer. For example, if you get about 10-inches of rain over the course of the spring and summer, an average, 1,360-square-foot roof would yield 8,160 gallons of rainwater. Not only are you conserving water, you are diverting water that would normally run into our waste water treatment systems or into streams and lakes. Plus, it’s better water for the garden. Some municipal water systems may be treated with chemicals, such as chlorine, that might be harmful to some plants. There are many commercial rain barrels available to purchase. The simplest rain barrel is a 40 to 80 gallon plastic barrel that can be converted into a rain barrel. You can also link multiple barrels together. Check out the resources below for visuals and detailed, how-to steps.

**WHAT YOU NEED:**

- 1 large plastic garbage can or 55 gallon food-grade barrel
- 1 tube of watertight sealant or roll of Teflon tape
- 2 rubber washers
- 2 metal washers
- 1 hose clamp
- 1 spigot
- A drill
- Landscaping fabric or fine screening
Step 1: Drill a hole

Start by using your drill to create a hole near the bottom of your barrel. This is where you'll insert your spigot. Use a drill bit that's a little smaller than or the same size as the spigot. Don't create a hole that's too low - you'll want to leave space underneath to fill your watering can.

Step 2: Insert the Spigot

Place a metal washer onto the threaded end of spigot, then put a snugly fitting rubber washer over the threads to help hold the washer in place and prevent leakage.

Step 3: Seal it up

Next, apply a bead of waterproof sealant over your rubber washer and insert the spigot into the hole. Wait for the sealant to dry, then run a rubber washer, followed by a metal washer onto the threads of the spigot inside the barrel. Secure the spigot in place inside your barrel with the hose clamp. This is important because it will keep your spigot from coming loose. (You can also run watertight Teflon tape to seal the spigot hole.)

Step 4: Make Entry and Exit Holes

Carefully cut a hole in the lid of your rain barrel. This hole should sit under your home’s downspout so the water runs right into the barrel. Cut the hole so it's large enough to accommodate the water flow from the downspout.

You'll also want to drill a hole or two near the very top of your rain barrel. This hole will allow water to overflow.

Here's a hint: You can run a short length of hose or PVC pipe, from the overflow hole to another rain barrel to connect them. That way if your rain barrel fills, the excess water will run into the next one and you don't lose overflow water.
Step 5: Seal the Top

Cut a piece of landscaping fabric or screening to sit over the top, then put the lid over the top of it to secure it. This will create a barrier that prevents mosquitoes and other pests from getting into your rain barrel water.

Step 6: Place Your Rain Barrel

Now that the hard work is done, all you have to do is get your rain water barrel in place. Position it directly underneath your downspout in a spot that's most convenient for you to use it. Then just wait for it to rain so you can enjoy the water -- and money -- savings. Here's a hint: Set your rain barrel up on a platform to help give more pressure if you connect it to a hose. It also makes it easier to fill up watering cans.

KEEP IN MIND:

- **Location** - Choose a location that is uphill from your garden, on sturdy ground, and close to the downspout of the gutter that will fill the rain barrel. A filled rain barrel can weigh more than 400 pounds.
- **Height** - Consider propping up the rain barrel a few feet off the ground on cinder blocks or bricks to add more height and flow when emptying the barrel.
- **Connections** - Connect the rain barrel to the gutter using an open or closed top system.
  - **Open System** - An open top system has many holes in the top of the rain barrel allowing water to flow freely, directly from the gutter, positioned above it, into the barrel.
  - **Closed System** - The closed top system has one line for water running into the barrel directly connected to the gutter downspout. You may have to purchase or build a diverter to connect the gutter to the rain barrel. You'll get less debris in the barrel with the closed system and can position the barrel further away from the house.
- **Debris Screen** - You'll need a fine mesh debris screen either attached to the top of the barrel or the end of the downspout. If you don't filter the rain water, debris will build up in the bottom of the barrel and clog the spigot.
- **Watering the Garden** - Run garden hose or soaker hose from the spigot to the garden. Soaker hoses are great because you can turn on the spigot and do other chores while the water slowly seeps out of the barrel to your plants. You can move the soak hoses to water various plants in the garden.
- **Storage** - Empty and store your rain barrel in a protected spot in winter so it doesn't get damaged from snow and ice and the seals for the spigot and diverter don't get compromised.

Resources: